

Preliminary flood risk assessment: Hampshire County Council

This addendum by Hampshire County Council (2017) updates the council's preliminary flood risk assessment report published in 2011. Read the addendum in conjunction with the [preliminary assessment report](#).

Addendum

The preliminary flood risk assessment (PFRA) and flood risk areas (FRAs) for Hampshire County Council were reviewed during 2017, using all relevant current flood risk data and information.

Past flood risk

Since publication of Hampshire's PFRA in 2011 the Authority's understanding of significant flood risk has changed in respect to one specific location in Hampshire.

The winter of 2013/14 was reported by the England and Wales Precipitation Series as being the wettest on their records (records began in 1766). This exceptional weather arrived following a wetter than average 2012 and 2013 which in turn were preceded by 4 years of very much drier than average years between 2008 and 2012 rendering the ground susceptible to groundwater and surface water flooding.

Between 7th February and the end of March 2014 flooding occurred at Buckskin a residential area in the north western sector of Basingstoke town. 45 properties were reported as flooding (36 internally and 9 externally). Using the flooding incident maps created it is estimated that up to 88 properties could have been flooded.

A Section 19¹ investigation determined that the flooding was instigated by high groundwater levels which caused a dormant spring to become active and the surface water drainage, formed of soakaways, not to function. This in turn caused runoff to follow the historic river course and accumulate in low lying developed areas.

There were 36 properties that reported foul flooding at their property indicating that the foul sewer network was unable to cope with the inundation from the groundwater and surface water flooding.

Groundwater modelling has identified 181 properties at risk of groundwater flooding once in 46 years.

Although Hampshire's local flood risk management strategy (LFRMS) assessed the overall flood risk from local sources at Buckskin as 'High' (ranked 20th), it was not in the top 50 sites for groundwater flood risk.

Since the flood event a Multi-agency approach instigated to assess and develop a potential scheme to address flood risk at Buckskin. Preliminary scheme design in progress. Indicative funding identified in the Flood and Coastal Erosion Risk Management (FCERM) Grant in Aid 6 year capital programme (2015/16 - 2020/21). Seeking Local Levy from Thames Regional Flood and Coastal Committee. The County Council and others have also indicated that subject to a cost/beneficial scheme that they will contribute towards scheme costs.

¹ An investigation into a flooding event that a lead local flood authority (LLFA) is required to carry out as under Section 19 of the [Flood and Water Management Act 2010](#), and according to [the LLFA's local flood risk management strategy](#)

Future flood risk

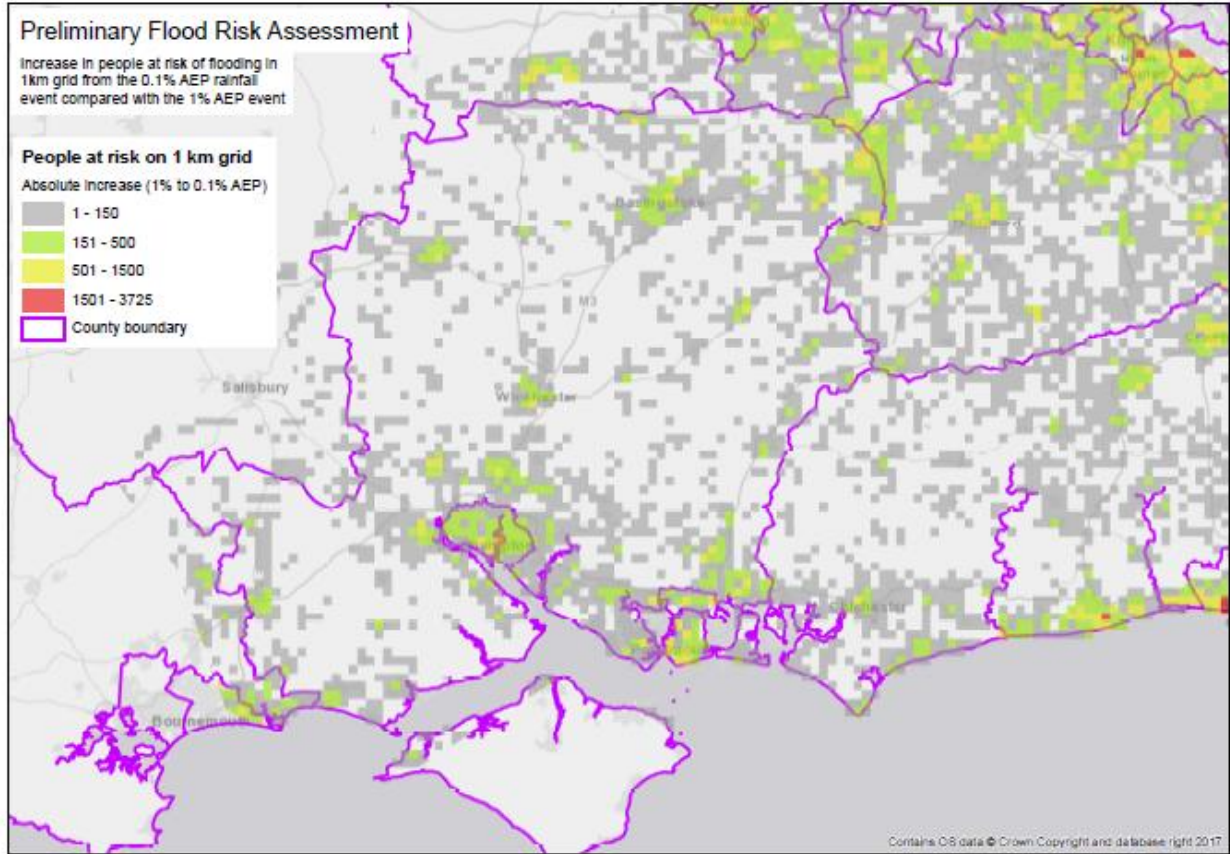
Hampshire's LFRMS adopted in July 2013, provides a detailed assessment of local flood risk in the county. In 2016 the County Council commenced a review of its LFRMS to coincide with the PFRA review process. The strategy will adopt a catchment-based approach to flood risk, around catchment areas of natural drainage basins irrespective of administrative boundaries and be informed by the latest information available.

This will include revised climate change allowances published in 2016 to support NPPF. <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>

Hampshire has a known history of groundwater flooding. During winter 2000/2001, over 100 towns and villages across the county suffered significant flooding with over 400 properties flooded with significant disruption and damage to infrastructure. Rainfall during 2012 reached a record high for England. From November 2012 onward groundwater levels in Hampshire rose leading to the issue of groundwater flood alerts by the Environment Agency.

The worst affected areas appear to have been in the eastern part of the County in the Wallington and Lavant catchments. More prevalent were problems related to the ingress of groundwater into the mains sewage systems. These problems were more widespread, occurring to the East of the county e.g. Hambledon and to the North e.g. St. Mary Bourne. The Hampshire Groundwater Management Plan Final Draft October 2013 provides an assessment of the risk from groundwater flooding.

The Environment Agency has also carried out an analysis at the national level to compare the number of people at risk from surface water flooding from a rainfall event with a 1% chance of occurring in any one year to the number at risk from an event with a 0.1% chance of occurring in any year. The numbers of people at risk are counted per 1km grid square. The resulting 'heat map' (see below) shows how the absolute number of people at risk increases between these two rainfall events for each 1km grid square.



Absolute percentage increase in the number of people at risk of flooding for 0.1 AEP (1000 year) rainfall event compared with 1% (100 year) event

Rank	LLFA Name	Residential props_100	Residential props_1000	Non residential props_100	Non residential props_1000	Key Services (incl elec)_100	Key Services (incl elec)_1000	Num People_100	Num People_1000	Absolute increase between 1 in 100 and 1 in 1000	Percentage increase in people at risk
105	Hampshire County	11,055	51,348	1,532	4,982	104	413	30,549	120,154	89,605	293

Note: Portsmouth City Council is ranked 1st and Southampton is 37th compared to Hampshire's 105th ranking out of 151 authorities overall.

Flood risk areas (FRAs)

The following FRAs have been identified for the purposes of the Flood Risk Regulations (2009) second planning cycle:

- Farnborough (Rushmoor Borough Council), together with Hawley (Hart District Council) to the north. The FRA also extends eastwards across the Blackwater River into Frimley, Sandhurst and Camberley (Surrey County Council).

Other changes

N/A

**Hampshire County Council
 December 2017**