

Are We Buying into a Flood Risk?

With an estimated 7 million homes and businesses in the UK at risk from flooding, and numbers set to increase due to climate change, flooding is likely to continue to dominate headlines in years to come.



In response to a growing awareness of the evolving risk of flooding, the Law Society Flood Risk Practice Note was updated in early 2020, offering refreshed guidance to help solicitors ensure that their clients are informed and as far as possible protected from the consequences of flood risk.

The Changing Climate

Looking back on the frequency of historic weather events in comparison to recent years, the impact which climate change is having on our environment and on extreme weather conditions is apparent.

Throughout 2020, there were a total of nine named storms and in the period from mid-December 2013 to mid-February 2014 alone, the UK saw at least 12 major winter storms, making this the stormiest period in the UK for 20 years. In comparison, between 1991 to 1997 there were no significant weather events, according to historical records held by the Environment Agency.

Since records began some 135 years ago, the ten warmest years have also been since 2002. Warm air has a greater capacity to hold moisture, which results in increased rainfall at a greater intensity over a shorter period, inevitably increasing the likelihood of flooding.

FCI's Flood Data partner, Vanessa Balmbra, Property & Financial Sector Specialist at JBA Risk Management, comments, "Climate change is already impacting flood risk and the severity and frequency of flood events is likely to increase in a future climate. Our recent modelling suggests that over 1 million additional properties will be at risk of flood by 2040, under a realistic warming scenario."

What Are the Risks?

The updated Law Society Flood Risk Practice Note details the importance of undertaking flood risk searches and investigating the availability and affordability of insurance cover, prior to entering into contractual agreements.

Often it may not be obvious that a property is at risk of flooding. Surface water and groundwater flooding is increasingly common and indiscriminate, and so it's important not to dismiss the possibility of flood risk based on local knowledge alone.

In this article, we outline each of the key risks, and through an analysis of buyer behaviour in the year to 1st April 2021,

seek to identify the areas of the country where homebuyers have been buying into the greatest potential exposure to flood risk.

Surface Water Flooding

Surface water flooding occurs when heavy rainfall is unable to drain away quickly and completely. This can be caused or exacerbated by several factors including the inability for the ground to absorb water, either from being saturated by past rainfall or baked hard by drought conditions; natural or manmade drainage being overwhelmed; or of course topography. Urban areas particularly are prone due to the prevalence of impermeable hardstanding such as concrete and tarmac.

Based on the thousands of environmental assessments handled by FCI during the year to April 2021, 1 in 10 homebuyers in England and Wales purchased a property with a potential risk of surface water flooding. Homebuyers in London were exposed to the greatest risk, with London Boroughs occupying nine of the ten top spots, all of which demonstrated an above-average surface water flood risk.

On average, homebuyers in the top 10 most affected London boroughs were nearly three times as likely to purchase surface water flood-prone properties compared to the rest of England and Wales (10%), with areas such as Kensington and Chelsea, and the City of Westminster encountering the highest risk (41% and 40% of purchasers, respectively). Given the dense urbanisation in London, and large areas of impermeable surface, it is not surprising that there is an elevated risk of Surface Water flooding. This is likely to be further exacerbated by London having a combined sewerage network that was designed for a population half that of its current level.

River and Coastal Flooding

River (otherwise known as *fluvial*) flooding takes place when the capacity of a river is exceeded, often after a heavy rainstorm upstream leads to increased loading. Flood defences may not be present, but even where they are they can become overwhelmed depending on their design standard and whether they are appropriately maintained and managed.

Coastal or tidal flooding occurs when high tides coincide with storms or high winds during periods of low barometric pressure, elevating wave heights and resulting in dry, low-lying land becoming inundated. An often-overlooked fact is that properties

don't have to be located on the coast to be at risk, as the tidal effects can reach far inland up rivers and estuaries.

According to FCI's transactional data, approximately 1 in 20 homebuyers purchased a property with a potential for river or coastal flood risk in the year to April 2021.

However, the risk of river and sea flooding is not proportionately distributed and five times as many homebuyers purchasing in coastal or inland river areas such as Runnymede, Spelthorne and South Lakeland will be exposed to a potential River or Sea flood risk when compared to the rest of England and Wales. South Lakeland is a district located on the north-west coast of England and includes a portion of both the Lake District and Yorkshire Dales National Parks which are prone to elevated levels of rainfall. Due to its coastal location, large areas of South Lakeland are at risk from tidal flooding, as well as several watercourses that could cause flooding across the district.

Groundwater Flood Risk

Groundwater flooding occurs when the capacity for water within or below the ground is exceeded, causing the groundwater levels to emerge at or near the surface. However, groundwater flooding can be a problem before it reaches the surface. Basements and underground infrastructure such as septic tanks or sewers can all be affected whilst groundwater levels remain below the surface. Additionally, high groundwater levels can exacerbate and in many cases be linked with the other types of flooding, both by creating saturated ground unable to accept further rainfall, or by rising in continuity with increased river or sea levels. Due to its nature, the effects of groundwater flooding can be prolonged, leading to more severe displacement of property owners, and the flooding itself can take many by surprise as groundwater levels recharge during periods of rainfall but may not manifest at or near the ground surface until sometime later. At risk areas include low lying land and the base of hills, as well as areas of chalk, sandstone, and localised sands or river gravels in valleys. Regions particularly at risk from this type of flooding include southern and eastern England, the Cotswolds, East Yorkshire, and the Eastern Pennines.

Overall Flood Risk

Throughout the UK in the year to April 2021, approximately 1 in 6 of all property transactions had an elevated risk of flooding associated with that property, according to an analysis of FCI transactional data.

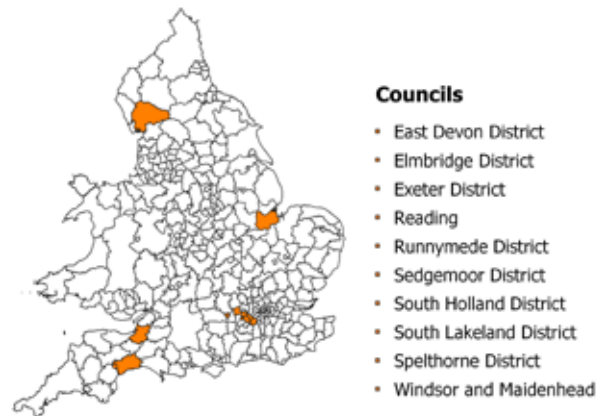
However, there is some good news, as the Environment Agency has recently announced that flood and coastal defence improvements which have taken place over the past six years have helped to protect over 300,000 homes from flooding, providing them with a greater resilience to climate change.

It is hoped that further improvements will benefit wider areas of the UK for which regular flood events are a common occurrence. This is especially the case as the February 2021 Parliamentary report, 'Managing Flood Risk' reveals that since 2014 there has been a wide variation in the level of flood defence investment per property across at-risk regions.

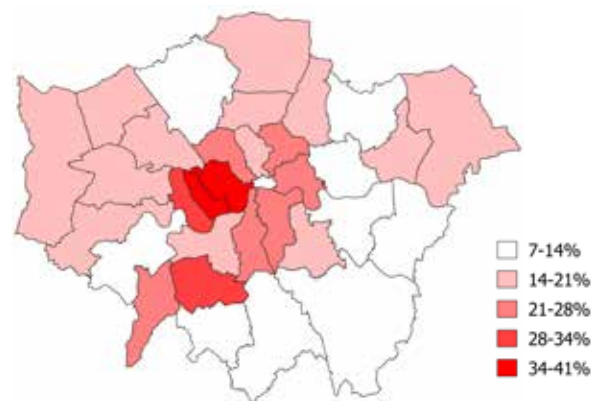
The detrimental impacts of flooding can take many forms, from the financial losses to the emotional and even mental health impacts. For those for which flooding is a regular occurrence, difficulties in obtaining affordable insurance are a cause for concern, together with impacted property values.

The RICS advises that, compared with a similar property without such a risk, the risk of flooding does reduce its value, particularly if that risk impacts the ability of a homeowner to obtain affordable insurance. However, for some 'at risk' property, the reduction in value may to some extent be offset by an increase in the property's amenity value from being close

Top ten - highest proportion of transactions with potential River or Sea flood risks in England and Wales



London Boroughs: % of transactions with potential Surface Water flood risk



to a picturesque river, stream or coast, and the desirability of features including a riverside or coastal location can in some instances outweigh the risks for some homebuyers, although this is a difficult element to quantify and so variation between parties such as prospective purchasers and valuers is likely.

How Can A Homebuyer Find Confidence in Their Investment?

By carrying out an environmental search, solicitors can help their client to ascertain if there is a risk. Where a flood risk is identified and further investigation is advised, a property level analysis, considering features which would influence the risk of flooding at the specific property can help the homebuyer to make an informed decision. It is also crucial to ensure that insurance is both available and affordable, prior to committing contractually to the purchase of a property.

FCI searches provide a full assessment of all types of flood risk based on the best available flood models and provide an overall flood risk rating for the property and its insurability. In the case of a further action for flood risk, an FCI Flood Appraisal follow-on report offers a more detailed property specific analysis, considering on-site features, flood warning history, local research, topography and Local Authority data, analysing the effectiveness of any defences, and providing an overarching professional opinion.