

Risk of flooding from rivers and sea

Understanding and using the map



Providing flood risk information

Flooding from rivers occurs when a river cannot cope with the amount of water draining into it from the surrounding land. Flooding from the sea happens when there are high tides and stormy conditions.

In December 2013 the Environment Agency published its risk of flooding from rivers and sea map on their website (moving to www.gov.uk in spring 2014), which shows the likelihood of flooding taking into account the location and condition of flood defences. The map uses the latest improvements in data, technology and modelling to help you understand how likely it is to flood where you live, travel or work.

Creating the map

Managing the risk of flooding from rivers and the sea is the responsibility of the Environment Agency.

The risk of flooding from rivers and sea map shows the results from the Environment Agency's National Flood Risk Assessment (NaFRA) shown in four categories of likelihood (High, Medium, Low and Very Low). NaFRA is an assessment of flood risk that covers the whole of England and Wales produced using local data and expertise.

It shows the chance of flooding from rivers with a catchment size greater than 3 km² and from the sea (both along the open coast and tidal estuaries). Smaller rivers are included in the assessment where they fall within the area that could be affected by an extreme flood. The likelihood of flooding from rivers and the sea information takes into account the location and condition of defences and the chance that they will fail or be overtopped. The map does not show other forms of flooding such as from highway drains, surface water, sewers, overland flow or rising groundwater.

Land heights

The land that has been identified as being at risk of flooding from rivers and the sea, with all features removed like buildings and vegetation, is divided into 50m squares or smaller areas where the square is intersected by a river or coastline. These 50m squares and smaller areas are called Impact Cells. The average height of each Impact Cell is calculated.

River and Sea Levels

As inputs to the Environment Agency's NaFRA model its 16 local teams use modelled river and/or sea water levels for a number of flood magnitudes ranging from the very small but frequent flood, to the very large but rare flood.

Defences

Information about 200,000 flood defences, such as the type, condition and standard of protection are also used in the NaFRA model. The model considers whether the defence will overtop or fail, based on this information, for the range of flood magnitudes.

Areas identified at risk

Where the NaFRA model shows water can get from the river or the sea into the floodplain, the model spreads that water across the land making it flow or pond based on the ground height data. A single value for how likely an area is to get wet is calculated for each Impact Cell. The results are presented in categories.

Local knowledge and information

The Environment Agency's 16 local teams model and review the data for their area that goes into the risk of flooding from rivers and sea map using local knowledge and other information on flooding from rivers and the sea where it is available.

Quality of information

For every Impact Cell, a rating was calculated based on how well the model performs, how good the data is, and reviewed by the 16 local teams. The results show how the map can be used.

How often it is updated

The risk of flooding from rivers and sea map on the Environment Agency's website is updated four times a year. The Environment Agency's 16 local teams plan, programme and complete updates to the map when better data becomes available such as new defences are built. These updates are driven by where there is a need to understand more about risk and whether there is new information available. You should check the map regularly to see if the flood risk in your area has changed.

Accessing and using the map

Access to the map

The risk of flooding from rivers and the sea map is available on the Environment Agency website – www.environment-agency.gov.uk/flood (moving to www.gov.uk in spring 2014). If you don't have access to the Internet, you can get a copy of the map posted or emailed to you by calling Floodline on 0845 988 1188.

Using the map

You can search the map on the Environment Agency website (www.environment-agency.gov.uk/flood) by postcode or town name. You can zoom in or pan out depending on the area you are interested in. Once you find the location you are interested in, you can click on the location and will be provided with further information including detail about the level of risk. There are four levels of flood risk. These are:

- High - each year, the area has a chance of flooding of greater than 1 in 30 (3.3%).
- Medium - each year, the area has a chance of flooding of between 1 in 100 (1%) and 1 in 30 (3.3%).
- Low - each year, the area has a chance of flooding of between 1 in 1000 (0.1%) and 1 in 100 (1%).
- Very Low - each year, the area has a chance of flooding of less than 1 in 1000 (0.1%).

The map does not contain sufficient information for it to be used to determine flood risk to individual properties, but it does give you an indication of whether your area may be affected by flooding from rivers and the sea and to what extent.

There are simple steps you can take to prepare for this type of flooding.

- Check if you can sign up to receive the Environment Agency's free flood warnings from [Floodline Warnings Direct](#). If there's a risk of flooding in your local area you'll get an automated message by phone, email or text which will give you time to take action and minimise potential flood damage.
- Check the [Environment Agency website](#) to see if you're at risk from other sources such as surface water or reservoirs.

FLOODS
DESTROY
DESIRY
BE PREPARED

- Complete a simple [flood plan](#)- it only takes ten minutes and doing this in advance will save you valuable time and reduce damage if you're flooded.
- Check the three-day flood risk forecast on the [Environment Agency website](#). This provides a county view of flood risk from all sources, based on weather forecasts and predicted rainfall.
- Find out how to prepare your property for flooding. Flood defences can't eliminate all risks of flooding but there are some practical steps which will help to protect your home.

Sharing data

Sharing the data enables everyone to make more informed decisions about flood risk. The risk of flooding from rivers and the sea map is available online for people and communities. The map and information is available on request from the Environment Agency, under licence to insurers and other commercial users.

Insurance

By clicking on the risk of flooding from rivers and the sea map you can also find out whether the likelihood of flooding from rivers and the sea in your area is classified as 'significant' where it is greater than or equal to 1 in 75 (1.3%) in any given year. 'Significant' was defined in the 'Statement of Principles' agreement between the Government and the Association of British Insurers (ABI), and ABI members are voluntarily continuing to meet their commitments to their existing customers under this agreement until a replacement is implemented.

The risk of flooding from rivers and the sea map and data is available to insurers, under licence, who may use it alongside other information to inform their decisions. Insurers are free to use whichever data they like to determine whether to offer insurance and at what price. Some insurers already have and use their own flood risk information. How insurers decide to set premiums and excesses is up to them.

If you are selling or buying a house, an assessment of flood risk is included in standard solicitor's searches. Whilst the Environment Agency's information is not property specific, making it available to be included in these assessments, allows the prospective purchaser to understand risks in the area of the property and make better informed decisions about their purchase.

Questions about the map

More information about your local flood risk

If you would like more information about the risk of flooding from rivers and the sea in your area or the management of flood risk please contact your local Environment Agency office – telephone the Environment Agency's Floodline on 0845 988 1188.

If you disagree with the map

If you disagree with the risk of flooding from rivers and the sea map then you will need to provide appropriate evidence to the Environment Agency for consideration. If agreed that your evidence should be considered, they will discuss timescales for changes with you. Anecdotal evidence will not be considered.