

Managing Flood Risk in Suffolk

A summary of the Suffolk Local Flood Risk Management Strategy

Introduction

“ Over 5.5 million properties in England and Wales are at risk of flooding from rivers, the sea or surface water. That’s one in six which means there’s a high chance one of these properties is your home or business. ”

National Flood Forum

In 2013 we will remember those along the East Coast who lost their lives, homes and families in the devastating floods of 1953. Since then there have been other floods across many parts of the country, including Suffolk. In 2007, a series of devastating floods affected many parts of the UK, both inland and on the coast, bringing widespread misery and economic damage in their wake. It also changed how we deal with flooding and its consequences. Suffolk is now responsible for producing a local plan which sets out how it is preparing to tackle flooding in the future.

This local plan is called the Suffolk Local Flood Risk Management Strategy. It is designed to help everyone in Suffolk understand and manage the risk of flooding. We have a duty to produce the plan, but we cannot make it work unless everyone in Suffolk plays their part.

Our aim is to try to reduce the risk of flooding and the effect it has and to protect peoples' safety and wellbeing across Suffolk. Our biggest challenge is that the amount of public money available is never going to be enough to protect everyone from the current flood and coastal risks and the

increasing risk over time due to climate change and further development. This means two things:-

1. **Finding new ways of doing things:** Traditional approaches to managing flood and coastal risk, generally statutory agencies (for example the Environment Agency or local councils) building flood and coastal defences, will need to be supplemented by everyone working together in their community. This will often involve new ideas and new ways of funding projects.
2. **Taking individual action:** It is important that everyone at risk from flooding recognises their responsibility to take action to protect themselves and their property. This will become more important as flood insurance premiums start to reflect the risks involved.



The full strategy document can be viewed online at:
www.suffolk.gov.uk/floodrisk

Why now?

The Flood & Water Management Act 2011 is the result of a major review carried out after the 2007 flooding, which called for county councils to prepare local flood strategies. The Act considers who is responsible for the various aspects of flood prevention and dealing with flood emergencies. It makes it clear that the only way forward is to have clearly defined leaders working with a local people and organisations to take action. Our local flood strategy will help us to achieve this together.

What is meant by flooding?

The plan's main focus is on local or flash flooding from surface water, groundwater or ordinary watercourses such as streams and ditches. This type of flooding is generally caused by localised heavy rainfall which overwhelms the drains. Unfortunately, this is becoming increasingly common but, up until now, there has been little understanding of the risks it poses or what actions are needed to deal with it. Until recently no

organisation had direct responsibility for this problem. Suffolk County Council is now taking the lead in dealing with local flooding, with help from other organisations as part of the Suffolk Flood Risk Management Partnership*.

The risk of flooding from rivers or the sea is better understood and generally more predictable, with current flood warnings focussed on this risk. This is the responsibility of the Environment Agency. If you would like to know more about this, please see the Environment Agency's website www.environment-agency.gov.uk/homeandleisure/floods/default.aspx

However, in reality water doesn't respect organisational boundaries and the only way to sort out most flooding problems is as a partnership between statutory bodies and local people and communities.

This strategy does not cover the risks from coastal erosion, which are identified in Shoreline Management Plans and managed by Suffolk Coastal and Waveney District Councils



*Suffolk Flood Risk Management Partnership

Suffolk County Council
Anglian Water
Essex and Suffolk Water
Mid Suffolk District Council
Suffolk Coastal District Council
St Edmundsbury Borough Council
Suffolk Resilience Forum
East Suffolk group of Internal Drainage Boards
Broads Authority
Environment Agency
National Farmers' Union
Babergh District Council
Ipswich Borough Council
Waveney District Council
Forest Heath District Council
Highways Agency
Ely Group of Internal Drainage Boards
Waveney, Lothingland & Yare IDB

How you can play your part

The strategy will be an important tool to guide and direct local flood risk management organisations when responding to floods in Suffolk. Suffolk County Council, working alongside the Environment Agency will take the lead, but everyone has an important part to play, particularly the following:

- **Land and home owners** whose land adjoins a watercourse (known as 'riparian owners') need to make sure that the flow of water is not obstructed in any way. They can also help to maintain existing flood defences.

A **watercourse** is a river, stream or ditch. It may not always have water in it but will be an important channel for water to flow down during heavy rainfall. Helping to keep water flowing, for example by clearing drainage grilles or removing dumped waste, could make a big difference to whether the area gets flooded or not.

Riparian owners who want to make any changes to streams and ditches – for example, putting in culverts or other structures, will need to talk to Suffolk County Council first. Please contact 01473 260929 if you would like to discuss this further or need practical help and advice.

- **Town and parish councils** can encourage local groups to prepare for emergencies, including flooding and provide information to

and from their local community. For help with making emergency plans, contact the Suffolk Joint Emergency Planning Unit on 01473 265321.

- **Suffolk residents** can report flooding problems and blocked drains at the earliest opportunity, helping us to understand local flooding and to find ways to alleviate the issue. Please see information on the back page of this booklet for details about who to contact and how to make reports.

When it rains heavily drains often become overwhelmed by the volume of water, which can lead to flooding – sometimes including sewage. You can help manage the amount of rainwater getting into drains by using water butts, rain gardens and ensuring permeable surfaces around their homes. And you must not put cement, fats, oils, paints, etc down drains as this can reduce the capacity of pipes, making flooding even more likely.

And in areas that have flooded before, or have been identified as at risk of flooding, you can play your part by signing up for flood warnings, and preparing emergency plans for your family as well as working with your community to ensure everyone remain safes in a flood. A useful booklet 'What to do before, during and after a flood' provides more information on this. Please contact 01473 260929 or email floods@suffolk.gov.uk if you would like a copy.



Partly blocked watercourse at the back of gardens in Ipswich

- **Builders and developers:** Anyone involved in developments, however small, are very important to managing flood risk. If they fail to properly consider flood risk they not only put occupants of the new properties at risk but could also make things worse for existing properties.

This applies both to major new housing or commercial developments and to homeowners putting down a new impermeable driveway. The collective effect of many people paving over their front gardens to make a parking space can have a significant effect on the risk of flooding in the area.

The Flood & Water Management Act makes sure that sustainable drainage systems are included in new developments wherever possible. In future any major building works will need drainage approval from the county council before construction starts. This will be a key part of ensuring we do not increase the number of people at flood risk.

Understanding the risk

Flooding is a natural phenomenon that can be made worse if we fail to plan ahead and properly manage our environment. Flooding can be unpredictable in both location and severity and dealing with these uncertainties can be extremely challenging, particularly when it comes to surface water flooding.

The first stage in managing flood risk is to understand the extent and causes of the problem and then to prioritise where attention and funds should be focussed.



What does this mean for Suffolk?

Suffolk has an extensive coast, estuaries and a network of rivers and low lying land which, combined with its urbanised areas, means it is at risk of flooding from a range of different sources. We estimate that one in six properties in Suffolk is at risk of flooding from one or more sources.

Much of Suffolk's coastal area is at risk from flooding from the sea particularly when there are high tides combined with storms in the North Sea.

Location	Properties at risk from surface water flooding*	Properties at risk from river flooding*
Ipswich	5600	650
Lowestoft	1100	940
Sudbury	750	490
Hadleigh	260	(this figure includes Great Cornard, Hadleigh and the River Stour valley)
Bury St Edmunds	820	150
Newmarket	910	60
Haverhill	700	10
Felixstowe	310	
Woodbridge	380	
Stowmarket	270	600 (includes Needham Market and the River Gipping corridor)
Needham Market	320	
Brandon	330	
*approximate numbers at risk in 2012. Note that risks from tidal rivers are not included in the river flooding figures.		

Most vulnerable communities understand this risk and are already working together and with agencies to ensure they are prepared for the next big storm.

In terms of surface water flooding, the areas with the highest concentration of people and critical infrastructure (such as like water treatment works, electricity sub stations, etc), at risk are listed below (based on information currently available). This does not mean that other areas and many of our roads are not at risk.

The table also illustrates that many of these towns are also at risk from river flooding, notably around the rivers Stour and Gipping. Coastal towns such as Felixstowe and Lowestoft are also at risk from tidal flooding but this is not included in the table.

Our next step is to carry out more detailed investigations in these towns and villages to consider whether there is an environmentally acceptable and cost-effective means of reducing the flood risk from all sources.

Because the money and resources available to Suffolk County Council and other flood management organisations will be limited, the ability to do anything about the risks maybe dependant on linking up with other activities and help from others. For example, a village might be working to clean up the environment alongside a stream and could work with us to improve the flow in the stream resulting in better flood management and a better place for people and nature. We would also expect major new developments to contribute to managing local flood risks wherever possible.



What are we aiming to achieve?

During the production of the Local Flood Risk Management Strategy we consulted with local businesses, organisations, community groups and the community themselves to confirm that we are taking the right approach to understanding flood risk and prioritising actions to reduce the existing risk and prevent it getting worse in the future.

In summary, our aim will be to ensure a sustainable approach to flood and coastal risk management that supports, and where feasible improves, the economy, environment and society in Suffolk.

The strategy has an associated action plan which sets out the following:

- what is going to happen;
- when it is likely to happen;

- who will be responsible for taking action;
- who else will be involved and
- how it might be funded.

Some actions should happen soon, but many will take much longer. The Action Plan will be reviewed on a regular basis to make sure that it is still relevant and we are making progress.

The Suffolk Flood Risk Management Partnership will regularly monitor the Action Plan and prepare an annual report on its progress. This will be publically available and subject to scrutiny.

We will also review and update the strategy over time to make sure it remains relevant and takes account of new laws and government guidance.

The table below summarises the main aims and actions in the strategy

Aim	Actions to achieve this aim
1	<p>To improve the understanding of flood risks. Ensures that everyone understands how they can play their part in reducing the risks.</p> <ul style="list-style-type: none"> ● The strategy explains the roles of organisations responsible for managing flood risk and the important roles that residents, businesses and land managers can play. ● We will involve communities in decisions about managing flood risk in their area. ● We will increase our understanding of surface water flood risks by building up a better record of where flooding occurs and targeted investigations of the causes of flooding in areas that are most at risk (surface water management plans) ● We will publicise a simple web-based process for recording all flooding so that residents and Parish Councils can help us understand where there are existing problems.
2	<p>To work together (statutory organisations and the public) to reduce flood and coastal risks, using all available resources and funds to the greatest benefit.</p> <ul style="list-style-type: none"> ● Organisations will work together through the Suffolk Flood Risk Management Partnership and the Suffolk Coast Forum to co-ordinate flood and coastal risk management activities. ● We will develop investment plans to attract more local funding that can then be used to access the national partnership funds for managing the risk of flooding. ● Collectively we will work with local communities who wish to contribute to short-term flood risk improvements. At the same time we will plan ahead to anticipate and reduce future flood risk




3	Aim	Actions to achieve the objective
3	To prevent increased flood risk as a result of new development by preventing additional water entering existing drainage systems wherever possible.	<ul style="list-style-type: none"> ● Property and business owners will be encouraged to protect their property if they are at risk from flooding. We will provide information and advice on this. We will also promote and support local emergency groups and parishes to prepare for flooding. ● Following government guidelines on sustainable drainage we will emphasise that there should be no increase in surface water flow from all future development ● We will make sure that planning decisions are based on up-to-date local information about flood risks and that there is a consistent approach across the county to managing surface water in new development.
4	To manage flood risk to take account of the economy, environment and wider society, including taking action to tackle climate change and making improvements under the Water Framework Directive.	<ul style="list-style-type: none"> ● We will ensure this strategy is linked up with local planning policies. ● We will promote the concept of multi-use spaces that will hold flood water, provide space for wildlife and local shared areas as part of the master planning process. ● We will link flood and coastal erosion risk management with the River Basin Management Plan and thus deliver improvements in water quality and quantity and aquatic ecology, wherever possible. ● We will try to make rivers and streams more natural by removing unnecessary structures in watercourses and in so doing improve ecology and reduce flood risk.
5.	To encourage maintenance of privately owned flood defence structures and ordinary watercourses, and minimise unnecessary constrictions.	<ul style="list-style-type: none"> ● We will provide guidance and support to people who want to maintain existing flood defences on private land. ● We will promote a clear process for 'consenting' to new and maintaining existing structures. This will discourage further blocking of watercourses. ● We will ensure riparian owners are aware of their duties to keep watercourses clear.
6.	To find and share information on the latest and best ideas from other parts of the country.	<ul style="list-style-type: none"> ● We will share, and where relevant publicise on the website, successful examples of managing flood risk to aid local decision making.
7.	To ensure that proposals and policies in this strategy are linked with the rest of the Fens area.	<ul style="list-style-type: none"> ● We will develop effective communication between Suffolk County Council and all organisations with responsibility for flood risk management in the Fens area where water management is particularly critical.

Flood and Weather Warnings

You need to know what they mean and what you need to do


Environment Agency warnings for river and sea flooding:

Sign up for the direct warning service on the Environment Agency website www.environment-agency.gov.uk or contact **Floodline** on **0845 988 1188**

 <p>FLOOD ALERT</p>	<p>This means “Flooding is possible. Be prepared”.</p> <p>Make some low impact preparations (e.g. move small valuable items upstairs, check travel plans) and remain vigilant.</p>
 <p>FLOOD WARNING</p>	<p>This means “Flooding is expected. Immediate action required”.</p> <p>Take more direct impact actions e.g. move belongings upstairs, install flood protection products.</p> <p>Remember that flooding may disrupt travel and affect gas, electric and telecoms, so be prepared.</p>
 <p>SEVERE FLOOD WARNING</p>	<p>This means “Severe Flooding. Danger to life”.</p> <p>Depending on the circumstances this level of warning indicates that people should evacuate the area or take shelter within safe buildings. Follow the advice of the emergency services.</p>

Severe weather warnings:

The location and severity of surface water or flash flooding, which is mainly caused by intense or prolonged rainfall, cannot be predicted with the same accuracy as river or sea flooding. Thus it is not possible to issue warnings in the same way. If you live in a low lying area or are known to be vulnerable to this type of flooding you need to heed weather warnings.

	<p>No severe weather</p>
	<p>Be aware</p>
	<p>Be prepared</p>
	<p>Take action</p>

Weather warnings are issued by the Met Office and relayed via TV, weather forecast updates, radio stations and on the website www.metoffice.gov.uk. They are colour coded depending on a combination of the likelihood of the heavy rainfall happening and the resulting surface water flooding it may cause.

Weather alerts (yellow) are issued more than 24 hours ahead.

Severe weather warnings (orange/red) are issued no more than 24 hours ahead (due to the unpredictability of weather systems) and are updated regularly.

If there has been an alert in your area and before you set out on a journey, **keep monitoring local weather forecasts or the Met Office website** and take appropriate steps to protect yourself and your property.

Help us keep Suffolk Safe and Reduce the Risk of Flooding

You can play your part in the following ways:

- **Ring 999** if flooding is posing a danger to life.
- **Remember! Flood water is dangerous.** Six inches of fast-flowing water can knock over an adult and two feet of water can move a car. Avoid walking, cycling or driving through flood water – there may be hidden objects or open manholes under the water. Reckless driving along flooded can cause blockages of roads wastes the efforts of the emergency services.
- Be aware of the risk of flooding in your area. If you are at risk, sign up for flood warnings and keep a watch out for weather warnings.
- Prepare a plan of what you will do if a flood is forecast.
- If you have flooded in the past, think about what you can do to protect your property and be prepared for a flood emergency. Ask us if you need help.
- Report any local flooding or blockage of drains (see contacts above)
- Keep watercourses free from debris and unnecessary structures.
- Talk to us if you want to put in a culvert or any other structure in a watercourse.
- Avoid paving over your garden unless you use suitable permeable surfaces.
- Help to keep rain water out of the drains by using water butts, green roofs, rain gardens, etc. Speak to us if you want more information on this.
- Don't wash cement, fats and oils down your drain as this can block them increasing the risk of flooding.
- If you are building properties, talk to us about sustainable drainage at the earliest possible stage.

If you have flood defences on your land, consider whether you can help to maintain them. Speak to us if you need help



Example of sustainable drainage system in Ipswich



Typical rain garden taking water off the roof



Sustainable drainage alongside a highway

