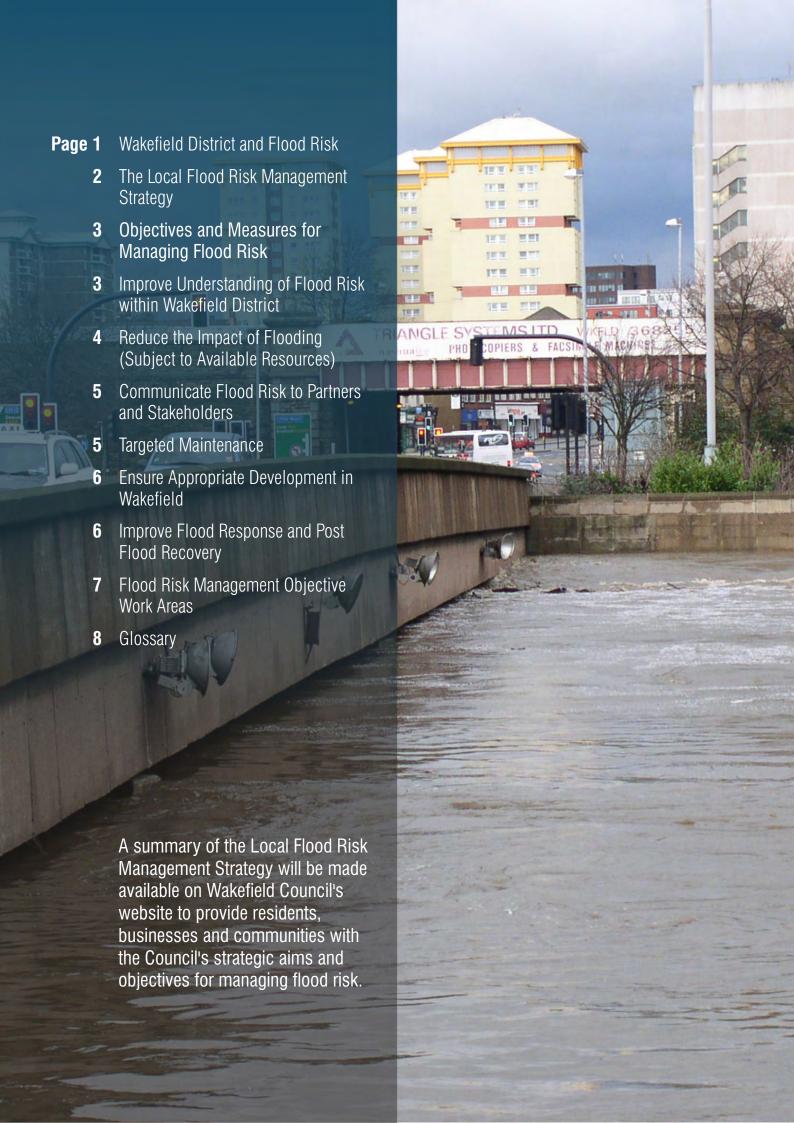


Wakefield Council Local Flood Risk Management Strategy (Summary)







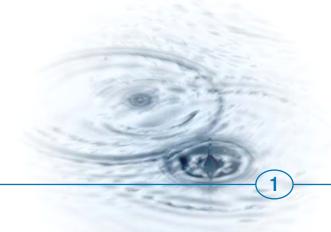
Wakefield District and Flood Risk

Adverse weather is a national concern, with climate change predicted to increase its likelihood. The Environment Agency's Flooding in England report, 2009, showed that 1 in 6 properties in England are at risk of flooding from rivers, the sea and surface water (5.2 million properties). Over half of these properties are at risk from surface water alone.

In recent years the Wakefield district has experienced significant flooding caused by large storm events:

- In June 2007, a total of 1470 residential properties reported internal flooding, with 13
 areas significantly affected. The local highway network, businesses, services, utilities,
 infrastructure, farmland and open land were also adversely affected, with 4 primary
 highway routes recorded as impassable for a significant length of time.
- In 2012, the Met Office reported the second wettest summer in England and the wettest April in the UK since records began, in 1910. Wakefield experienced very high rainfall throughout 2012 but, thankfully, the pattern of rainfall was such that less than 10 residential properties were reported to have been adversely affected by flood water.
- In the summer of 2014, the Council received well in excess of 100 reports of surface
 water flooding caused by significant storm events. A total of 78 residential properties
 were confirmed internally flooded, the majority of which were located within the east of
 the District where the localised intense storm events tracked.

Regarding on going flood risk within the District, the latest national flood maps have identified over 6000 individual properties at risk of flooding from rivers and watercourses within the District and over 2600 at risk from surface water flooding.





The Local Flood Risk Management Strategy

The Local Flood Risk Management Strategy is a high level report, providing Wakefield Council's approach for managing local flood risk throughout the District.

The Local Flood Risk Management Strategy aims to:

- Enable residents, communities, businesses and other risk management authorities to effectively manage local flood risk together.
- Ensure increased understanding of local flood risk to effectively prioritise investment in flood management activities.
- Guide local spatial planning and prevent inappropriate development.
- Ensure that emergency plans and responses to flood incidents are effective.
- Help communities recover quickly and more effectively after flood incidents.

To secure greater economic growth it is essential that the District is resilient to the effects of adverse weather, flooding being a priority concern. In order to continue the drive to regenerate our city, towns and communities, investor confidence will only be maintained with the knowledge that infrastructure and transport connectivity is robust and able to cope with the predicted consequences of climate change.

Wakefield Council's support to increase health and economic wellbeing within the District's communities, especially in our most deprived neighbourhoods, is reinforced by effective targeted flood risk management activities. Communities supported to manage flood risk will feel less vulnerable and more able to focus on the opportunities and outcomes they aspire to.

In these financially challenging times, it is important that flood risk management activities are targeted effectively. To this end, Wakefield Council is utilising information from all available sources, including national flood maps, historic records and information shared with other Risk Management Authorities, to increase understanding of district wide flood risk and to effectively prioritise resource.



Objectives and Measures for Managing Local Flood Risk

In order to effectively manage flood risk, Wakefield Council has six high level objectives to provide a strategic steer for flood risk management activities undertaken in the District by all RMAs:

Improve understanding of flood risk

Reduce the impact of flooding on a priority basis

Communicate flood risk to partners and stakeholders

Carry out targeted maintenance on a priority basis

Ensure appropriate development

Improve flood response and post flood recovery

Improve Understanding of Flood Risk within Wakefield District

To improve the understanding of flood risk from watercourses, surface water, groundwater and other sources, Wakefield Council proposes to utilise flood risk information from all available sources (local historic flood records, local flood incident reports, flood investigations, external Risk Management Authority asset and flood incident records, national flood maps, etc.). In addition, Wakefield Council has a statutory duty to maintain a register of all structures and features likely to have a significant effect on flood risk.

To improve understanding of flooding from **ordinary watercourses**, Wakefield Council is required to:

- Maintain a statutory register of significant obstructions to flow within the District's watercourses, based on flood risk (recording the location, capacity, condition, ownership, etc.) Significant obstructions to flow include bridges, culverts, trash screens, flumes, weirs, etc.
- Maintain a statutory register of other watercourse structures and features (walls, embankments, etc.) that are deemed to act as flood defences.
- Ensure that future reports of watercourse flooding are responded to by carrying out appropriate site investigations to capture relevant flood detail, including the mechanisms of flooding and resulting impact.





In addition, Wakefield Council proposes to:

• Capture all available recorded and reported information on significant flooding incidents caused by watercourses.

To improve understanding of flooding from **surface water** and **groundwater**, Wakefield Council is required to:

 Ensure that future reports of significant surface water flooding are responded to by carrying out appropriate site investigations to capture relevant flood detail, including the mechanisms of flooding and resulting impact.

In addition, Wakefield Council proposes to:

• Capture all available recorded and reported information on flooding incidents caused by surface water runoff and groundwater.

To improve the understanding of flooding from **other sources**, Wakefield Council is required to:

 Maintain effective communication links with external flood risk management authorities to share information on flood risk and arrive at effective flood responses.

In addition, Wakefield Council proposes to:

 Maintain open communication with internal risk management teams (Highway Drainage team, Street Scene, etc.) and assimilate their relevant flooding records into the flood risk management database to improve overall understanding of flood risk.



Reduce the Impact of Flooding (Subject to Available Resources)

To reduce the impact of significant flooding within the District, Wakefield Council proposes to:

- Maintain strategies for reducing flood risk within the District's highest risk
 catchments, utilising local flood risk information and, where appropriate,
 employing computer modelling analysis to accurately assess flooding
 mechanisms within each of these catchments to arrive at cost effective
 flood management solutions, subject to available resources.
- Utilise outputs from the catchment modelling to present cost effective robust solutions in the application for internal and external (local, regional, national and European) funding streams for flood risk reduction, subject to available match funding.
- Maintain engagement with riparian owners and significant land owners to negotiate the effective use of watercourses and open land for flood storage, subject to available resources.

Communicate Flood Risk to Partners and Stakeholders

To effectively communicate flood risk management information, Wakefield Council is required to:

- Publish the summary of its Local Flood Risk Management Strategy (to be made available on Wakefield Council's flood risk management web pages).
- Maintain effective communication links with other flood risk management authorities, including neighbouring local authorities, by attending and holding regional and local partnership and liaison meetings to develop effective sharing of flood risk knowledge and flood risk reduction best practice.

In addition, Wakefield Council proposes to:

- Further enhance the published information regarding local flood risk, resident (riparian) responsibilities, property protection and resilience on Wakefield Council's flood risk management web pages.
- Communicate directly with communities, businesses, organisations, landowners and the public by holding and contributing to community forums in high flood priority areas of the District (see appendix D) to raise awareness of flood risk and provide guidance on flood management.

Targeted Maintenance

To ensure watercourse systems effectively serve the District's drainage, Wakefield Council proposes to:

- Continue targeted 'hotspot' investigation and clearance works of watercourses and associated assets, such as highway culvert trash screens, bridges and culverts, managed by Wakefield Council. The frequency of clearance works based on flood risk and available resources.
- Maintain a risk based watercourse trash screen upgrade programme, subject to available funding and resources.
- Ensure private riparian owners are contacted when maintenance works are required to maintain unimpeded flow within privately managed watercourses.

To ensure existing flood storage areas remain effective, Wakefield Council propose to:

 Maintain a programme of maintenance works such as litter clearance, desilting and vegetation management, subject to available resources.







Ensure Appropriate Development in Wakefield

To ensure future developments are sustainable and do not increase flood risk, Wakefield Council, as LLFA and having a duty to aim to make a contribution towards sustainable development, is required to:

- Become a statutory consultee to the planning authority on major development applications (10 dwellings or more) to ensure robust sustainable drainage systems are provided wherever appropriate.
- Develop a robust local policy on consenting for works in watercourses.

In addition, Wakefield Council proposes to:

- Implement a robust local policy on flood risk management and utilise all available flood risk and climate change information to deliver sustainable drainage outcomes for sites allocated for development through the Local Development Framework process.
- Develop a process with Wakefield Council's Planning Department to create clear guidance for developers to manage local flood risk arising from, and in relation to, their development proposals of less than 10 properties.
- Engage with significant developers to raise awareness of catchment wide flood risk management initiatives and potentials for aligning with and benefiting from them.
- Seek to secure developer contributions, where appropriate, to mitigate increased flood risk resulting from development.
- Offset the environmental impact of development by enhancing biodiversity within areas designated for flood storage.



To improve flood response and post flood recovery, Wakefield Council proposes to:

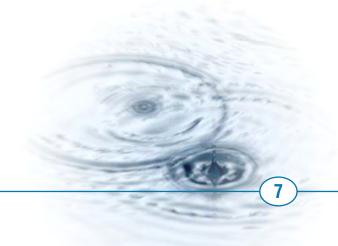
- Maintain effective communication links with the Met Office and the Environment Agency to ensure the most accurate forecast information on rainfall and anticipated flood impact is received.
- Maintain regular liaison with flood risk partners, emergency services, Wakefield Council's Emergency Planning team, other service areas and Wakefield Council's Contact Centre before, during and after significant rainfall events.
- Provide clear messages and regular updates via an internal indicative flood forecast and the media.
- Maintain the use of on the ground observers to feedback and record information on flood extents and impact (the information to be used for future investment prioritisation).
- Maintain and develop the use of specialist flood response officers, administration and volunteers during flood events.



Flood Risk Management Objective Work Areas

Measures responding to current legislation

				Current registation	
Improve Understanding of Flood Risk	Reduce the Impact of Flooding (on a priority basis)	Communicate Flood Risk to Partners and Stakeholders	Enforcement and Targeted Maintenance	Ensure Appropriate Development	Improve Flood Response and Recovery
Statutory register of watercourse structures	Catchment flood risk management activities	Local Flood Risk Management Strategy	Targeted maintenance	Development management	Ensure accurate information
Statutory register of flood defence structures / features	Secure internal match funding	Enhance existing published information	Reactive emergency works	Land asset disposal	Effective liaison with partners
Statutory flooding investigations	Secure external funding streams	Communication with internal risk management teams	Trash screen upgrade programme	Biodiversity and ecology	Flood impact data capture
Flood incident data capture		Community resilience forums	Riparian contact and enforcements	Consenting of watercourse works	Flood resilience events and training
Hydraulic catchment modelling		Strategic partnerships	Flood storage area maintenance	Developer engagement	
Communication with risk management authorities			Apply legislation	LDF engagement	
Production and review of PFRA				Development of SuDS through	



planning

Glossary

CIL	Community Infrastructure Levy				
Defra	Department for Environment, Food & Rural Affairs				
EA	Environment Agency				
FMfSW	Flood Map for Surface Water				
IDB	Integral Drainage Board				
LDF	Local Development Framework				
LDFRM	Land Drainage Flood Risk Management				
LFRMS	Local Flood Risk Management Strategy				
LLFA	Lead Local Flood Authority				
PFRA	Preliminary Flood Risk Assessment				
RFCC	Regional Flood and Coastal Committee				
RMA	Risk Management Authority				
SuDS	Sustainable Drainage System				
WDH	Wakefield and District Housing				
WMDC	Wakefield Metropolitan District Council				