

Local Resilience Forum

Multi-Agency Flood Plan

If an incident is underway click to go to your action sheet







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Government security classification

This plan contains material classified as OFFICIAL under the Government Security Classifications May 2018 policy.

The principles of the policy require that:

- Information receives the appropriate degree of protection.
- Persons with access have a duty of confidentiality and responsibility to safeguard information.
- Access to information is granted on a 'need to know' basis and an appropriate level of personnel security clearance.
- Exchange of information with external partners is protected accordingly.

Security requirements

Personnel security	 A baseline personnel security standard* check must be in place for all individuals with access to the plan. All individuals should have an awareness of personal responsibility and duty of care. Access should be restricted to those with an operational 'need to know'.
Physical security	 A clear desk and screen policy should be in place. The plan should be stored in a locked container in a secure building when not in use. Transfer by hand or post should be under single cover including a return address but no classification marking on the envelope.
Information security	 Electronic copies may only be stored on a personal computer or computer network which is secure and where access is limited to those who have an operational need to view the plan. Information may be transferred electronically via email. Use of removable media should be avoided wherever possible and restricted to encrypted devices only.
Disclosure	 Requests for information contained within the plan which are made under the Freedom of Information Act 2000 should be referred to the emergency planning team as exemptions are likely to apply. The plan contains personal data as defined in the UK General Data Protection Regulation. The information contained within the plan should not be disclosed to any unauthorised person and processing must be carried out in accordance with the UK General Data Protection Regulation, Data Protection Act 2018 and subsequent legislation.
Disposal	When no longer required the plan should be destroyed in a manner which makes reconstitution unlikely.

* or equivalent recruitment check comprising verification of identity, nationality, employment history and criminal record.



Document control

This plan has been produced by Derbyshire County Council's Emergency Planning Team on behalf of the Derbyshire Local Resilience Forum (LRF).

The plan is subject to periodic review; however partners should inform the author of any material changes within their respective organisations which may require the issue of an interim amendment. Unauthorised amendments or copying of the whole or part of this document is not permitted.

Electronic versions of the plan may be printed, however these will be uncontrolled copies and should be disposed of securely if superseded or no longer required.

Version	History			
Version	Date	Detail	Author	Approver
1.0	31/03/2016	Annual update, plan restructure and formatting changes.	****	****
2.0	31/03/2018	Annual update	*****	****
2.1	31/10/2018	Interim update	*****	****
3.0	31/11/2020	Annual update incorporating new MAFP guidance & lessons learnt.	****	****
3.1	16/09/2021	Interim update prior to being submitted for Defra 'Health Check'	****	****
3.2	01/12/2022	District/Borough/City updates/Agency updates	*****	****

Version control

Distribution list

Access via ResilienceDirect:

All Derbyshire Local Resilience Forum partners

Paper copy holders:

Copy No	Holder	Location
01	Emergency centre	DCC, Matlock
02	Forward control copy	DCC, Matlock
03	Emergency centre	Derby City Council



Assurance

All organisations that contribute to the plan should approve the MAFP. As a part of the plan update process key partner agencies are consulted to ensure the content is relevant and up to date.

Peer review has taken place with practitioners from neighbouring LRF/Resilience Partnerships as a part of the Trent Catchment Flood Group, which meets biannually.

The LRF Flood Group meets bi-annually, and partners are made aware of any updates key information changes to the plan, and content discussed.

A Gap analysis was carried out in conjunction with the Environment Agency in 2019. The Environment Agency are providing further support by performing a health-check on MAFP's once every three years, with the first one taking place September 2021.

Training and exercising

Date	Detail	Organisation	
2011	Exercise Watermark	Multi-agency	
2013	Flood Awareness Training EBC	Multi-agency	
2014	Exercise Polar Resilience	Multi-agency	
2014	Flood Awareness Training HPBC / CBC / Derby City / SDDC	Multi-agency	
10/2014	Flood Warden Training	DCC / EA / Volunteers	
2015	Flood Awareness Training AVBC / BDC / NEDDC / DDDC	Multi-agency	
09/2015	Flood Warden Training	DCC / EA / Volunteers	
05/2016	Extended Floodline Service Training	DCC Emergency Planning Team	
10/2016	Flood Warden Training	DCC / EA / Volunteers	
2017	Flood Awareness Training SDDC / EBC	Stephen Peace	
10/2017	Flood Warden Training	DCC / EA / Volunteers	
02/2018	Trent Catchment Flood Exercise 'Storm Andrew'	Regional multi LRF exercise	SCG and ReSCG
2018	Flood Awareness Training CBC / Derby City / DDDC	Multi-agency	



2021	Flood Warden Training	DCC / EA / Volunteers	Virtual by Communities Prepared
2022 Oct	Flood Warden Training	DCC / EA / Volunteers	Virtual by Communities Prepared
2022 Nov	Flood Ex 22	Regional multi LRF exercise	SCG



1 Background information

1.1 Introduction

This flood plan has been produced in line with Defra guidance on developing multiagency flood plans (MAFPs) to respond to the flood risks identified in each district/borough council area of the County of Derbyshire and in Derby City.

The plan is intended to **inform and guide** those managing the response to a flood emergency at control centres and other management levels rather than give detailed operational instructions for individual staff attending a flood incident.

An annex for each Derbyshire district/borough council area and the Derby City area accompanies the plan and provides specific details about flood risks within the various communities.

The plan will be reviewed annually taking account of any new flood risk information and outcomes from incidents and exercises. The plan will also be evaluated periodically by the Derbyshire Local Resilience Forum (LRF), taking advice from the Environment Agency (EA) as necessary.

This plan should be used in conjunction with the Derbyshire LRF Major Incident Procedures Incorporating Strategic and Tactical Management Guide and JESIP principles.



1.2 Causes of flooding

There are many causes of flooding. Sometimes flooding occurs from a single origin but often, a combination of sources cause difficulty in identifying responsibility for repairs or remedial action.

Types of flooding covered by this plan can be divided into two main categories, fluvial and pluvial, as described below:

Fluvial flooding (flooding from breached rivers or other watercourses)

This includes flooding from large rivers, brooks and streams, where prolonged or intense rainfall exceeds the capacity of watercourses and causes water to overtop and/or breach flood defences. Certain watercourses have been designated main rivers due to their ability to flood numerous properties. Watercourses with more limited flood risk remain ordinary watercourses.

Fluvial flash flooding (flooding in certain steep sided valleys, also known as rapid response catchments)

This is a variation of a fluvial or river flood, but it occurs in a steep valley and is usually localised. This has the effect of accelerating the water downhill, so it achieves more destructive power. Often, the water is contained within a narrow valley as well, compounding the speed and depth effect. **NB:** A flash flood in this context, as defined by the EA, is specifically a flood occurring in a steep sided valley and is not a flood which occurs suddenly as commonly used.

Pluvial flooding (flooding from surface water, excessive run-off)

Predominantly occurs when intense rainfall either exceeds the holding capacity of land and drainage systems or is unable to be absorbed due to soil conditions, urbanisation or rainfall intensity. Sewer flooding can also be caused by the ingress of surface water overloading the sewer. Standing water then accumulates until it flows into another drain or watercourse. Surface water flooding can merge with flooding from other sources to become indistinguishable. Rapid development, an ageing drainage system and increased rainfall means surface water problems are increasing

NB: The following types of flooding are not covered by this plan:

- Groundwater flooding (flooding from elevated water table). There is no known groundwater risk identified within Derbyshire.
- Sewer flooding (except when caused by surface water as noted above).
- Burst water pipes or water mains.
- Reservoir inundation and private lakes.

Whilst the above are not considered directly as a part of this plan, the contribution they may have on local conditions should be considered as part of any response.



1.3 Legislation

The Civil Contingencies Act 2004 places a duty on local authorities, as Category 1 responders, to assess the risk of flooding and produce a multi-agency flood plan (MAFP). See section 1.5 on page 4 for further information on flood risk in Derbyshire.

In accordance with legislation under the Flood and Water Management Act 2010, Derbyshire County Council and Derby City Council are designated Lead Local Flood Authorities (LLFA). It is the role of the LLFA to co-ordinate flood risk management with other agencies such as the district councils and water companies who are designated risk management authorities.

Other responsibilities and duties under the act include:

- producing a preliminary flood risk assessment (PFRA) and local flood risk strategy
- responsibility for consenting changes to ordinary watercourses under the Land Drainage Act (1991)
- duty to create and maintain an asset register of all structures deemed to have a significant flood risk impact
- duty to investigate flood events (Section 19) within Derbyshire/Derby City
- role as the Sustainable Drainage Systems (SuDS) Approval Body (SAB)
- powers under the Section 25 of the Land Drainage Act regarding the resolution of flooding issues and identification of parties responsible for causing flooding.

Under the same act, the EA has been given the role of having the strategic overview for all sources of flooding.

1.4 The context of flooding in Derbyshire and Derby City

Across the county and city there are significant areas of land and many thousands of properties, including some densely populated urban areas, at risk from one or more sources of flooding. A large part of the county boundary is denoted by rivers and rivers pass by or through several urban areas. Some larger urban areas are protected by flood defences.

Parts of north Derbyshire have small watercourses which rapidly respond to heavy rainfall and have steep valley catchments which meet the EA's definition for providing conditions likely to cause flash floods. In the south of the county there are more mature rivers which carry the rainfall from large catchment areas, rising slowly but remaining high for long periods ie days or even a few weeks before falling back to normal levels.

In recent years, there has been a marked increase in flood events caused by surface water. Details of locations affected by recurring surface water flooding are incorporated into the annexes of this plan.



1.5 Overview of the flood risks in Derbyshire and Derby City

The Civil Contingencies Act 2004 requires local authorities, as Category 1 responders, to assess the risk of flooding in their area. The risk is assessed in terms of likelihood of flooding occurring and the potential health, social, economic and environmental impacts.

The risk assessments for Derbyshire and Derby City are included in the <u>community</u> <u>risk registers</u>. These risk assessments are reviewed regularly, and the latest risk ratings are summarised below:

City/district/borough area	Fluvial flood risk	Pluvial flood risk
Amber Valley	High	High
Bolsover	Medium	Medium
Chesterfield	High	High
Derby City	Very high	High
Derbyshire Dales	High	High
Erewash	Very high	High
High Peak	High	Medium
North East Derbyshire	Medium	Medium
South Derbyshire	Very high	Medium
All Derbyshire	Very high	High

The flood risk annexes accompanying this plan identify flood risk areas, vulnerable premises, and infrastructure in detail.

The above risk assessments identify that in most parts of Derbyshire and in the city of Derby, there is a high enough river flood risk to require a multi-agency flood plan (MAFP) to be prepared. (NB: the level of flood risk in Bolsover is much less than other areas of the county, so a MAFP is not strictly required to meet Defra guidelines. However, as there are locations which do flood, a section on flood risks for Bolsover has been included.)

Information on pluvial or surface water flooding is presently limited but will be expanded as more detailed information becomes available.

Flood awareness training takes place on an on-going cycle for all districts/boroughs and city. The training is provided for local responders in each locality, by Derbyshire County Council and the EA.

Derbyshire LRF aim to exercise the MAFP at least every three years. See training and exercise table on page iv for details.



1.6 Aims and objectives

Aim

To provide background, information, and guidance to those preparing for and managing the response to a significant flood incident in Derby or Derbyshire, particularly strategic and tactical commands, in order to facilitate and effective, co-ordinated response and minimise the disruption caused.

Objectives

In order to achieve the aim, the objectives of the plan are to:

- outline the causes and context of flooding in Derbyshire and Derby City and describe the flood risks and vulnerabilities in each council area
- identify the roles and responsibilities of the multi-agency response organisations before, during and after a flood incident
- outline the activation and triggers used to implement the plan
- describe the control and co-ordination arrangements for the flood incident response including local incident control points appropriate to flood risk areas.

1.7 Supporting plans and documents

The below LRF plans could also be used during a flood incident.

Plan
Human Aspects Plan
Data Sharing (Vulnerable People) Agreement
Resilient Telecommunications Plan
Strategic Co-ordination Centre Activation Plan
Severe Weather Plan
Strategic Holding Area Plan
Strategic Recovery Plan
Warning and Informing Plan
Major Incident Procedures Incorporating Strategic and Tactical Management
Guide and JESIP principles

The plans listed above can be accessed through ResilienceDirect via the following link: ********** which will take you to the Derby and Derbyshire LRF File Store where copies of the plans are stored or liaise with the Derbyshire County Council Emergency Planning Team.



2 Roles and responsibilities of responding agencies

The response to a major flooding incident involves several organisations working together at a local level. Their respective roles and responsibilities in a major flood incident are set out on the following pages.

Action sheets for the main responding agencies are given in appendix A.

Organisation	Planning	Response	Recovery
All responders	 Liaise with other LRF members. Develop own emergency and business continuity plans and procedures. Participate in internal and multi- agency training and exercises. Determine the risk of flooding to own assets and put in place suitable flood protection measures. Responsible for drainage of any land the organisation owns (as riparian owner). Procure suitable resources and ensure their maintenance. Distribute flooding advice to the public. Monitor the weather forecast. Receive and disseminate internally EA flood warnings, Met Office severe weather warnings and flood guidance statements. Work with communities to develop local flood plans 	 Save/protect life and relieve suffering. Contain the emergency and limit its escalation where reasonably practicable. Continue to monitor the weather forecast. Continue to receive and disseminate internally EA flood warnings, Met Office severe weather warnings and flood guidance statements. Provide the public with warnings, information, and advice. Assess the developing situation and allocate resources as necessary. Always protect the health and safety of personnel. Attend TCG/SCG as required. Safeguard the environment. Protect property. Maintain or restore the critical services of their organisation. Maintain any watercourses belonging to their organisation. 	 Repair equipment used during the response and replenish as necessary. Inspect and repair damage to own assets. Attend public meetings. Promote self-help in affected communities. Facilitate the recovery of affected communities. Collate information/data on flooded properties / incidents / rainfall and share with partners. Attend incident debriefs, evaluate the response, and identify lessons. Carry internal reviews to improve services. Facilitate investigations and inquiries. Attend LRF Strategic Recovery Group if convened. Consider applying for emergency government funding Bellwin scheme.



Organisation	Planning	Response	Recovery
	Recruit and train flood wardens.	 Activate operational procedures and emergency plans. Implement business continuity plans. Provide personnel and resources to assist the response. Maintain records of response related expenditure. Provide mutual aid wherever possible. Maintain incident logs. 	
Environment Agency	 Develop strategies for water control on main rivers. Develop strategies for flood defences, seek funding and install those approved. Maintain existing flood defences and flood control structures. Arrange clearance of obstructions to water flow on main rivers. Maintain river and rain gauge networks and the supporting technology. Monitor water levels and flows for flood warning purposes. Maintain the arrangements to issue flood warnings. Assess flood risks from main rivers. Produce maps and other data identifying flood risks from main rivers. Raise awareness of flood risk. 	 Issue flood warnings to the public, media, and professional partners. Check and maintain EA flood defence assets. Operate EA flood control structures. Carry out emergency repairs or reinforcements of EA flood defences. Advise the emergency services and local authorities of flood forecasts. Provide representatives to selected incident control points (ICPs). Support the emergency services and local authorities once EA structures and defences are secure. Continue to support the FFC's activities. See all responders section above for shared roles and responsibilities. Publish live river level and forecast data to gov.uk. 	 Issue warnings no longer in force messages relating to flood warnings. Collect data, photographs etc. on the extent of the actual flood. Incorporate data on the flood to improve flood risk maps and future warnings etc. See all responders section above for shared roles and responsibilities.
1		Derhyshire Prenared	



Organisation	Planning	Response	Recovery
	 Recruit subscribers to flood warning services. Recruit and train flood wardens. Provide information and guidance on flooding matters. Contribute staff, expertise, and data to the Flood Forecasting Centre (FFC). See all responders section above for shared roles and responsibilities. 		
Met Office	 Provide weather forecasts for the public and partner agencies. Issue severe weather warnings. Provide further guidance to partner agencies via the public weather service advisor. Contribute staff, expertise, and data to the FFC to issue flood guidance statements and maintaining Hazard Manager. 	 Continue to provide weather forecasts and severe weather warnings, especially those relating to further rainfall or improving conditions. Continue to provide further guidance to partner agencies via the public weather service advisor. Continue to support the FFC's activities. 	Compare the forecasts issued against actual events to determine accuracy and possible improvements to forecasts.
Flood Forecasting Centre	 Maintain and develop improved techniques to monitor weather and hydrological conditions likely to result in flooding drawing on expertise and data from the EA and Met Office. Issue daily national flood guidance statements. 	 Continue to issue national flood guidance statements. Provide further guidance to partner agencies as necessary. 	Compare the flood forecasts issued against actual events to determine accuracy and possible improvements to forecasts.



Organisation Planning Resource Recovery Derbyshire Constabulary • Maintain the arrangements for Strategic Command and Control (SCC) at Joint Police and Fire HQ. • Assess the developing situation and allocate police resources as necessary. • Assist in the arrangements for recovery. • See all responders section above for shared roles and responsibilities. • Assist in the arrangements for allocate police resources as necessary. • Continue to protect previously flooded property until normality is restored. • E setablish cordons to facilitate the response of the other services. • Co-ordinate the response of the emergency services. • Continue to assist in arrangements for access and egress until transport disruption is reduced. • Provice help with any evacuation required. • Provice help with any evacuation required. • Provice help with any evacuation required. • See all responders section above for shared roles and responsibilities. • Collect and process casually information and identification and removal of the dead. • See all responders section above for shared roles and responsibilities.



Organisation	Planning	Response	Recovery
Derbyshire Fire & Rescue Service	 Develop and maintain arrangements to lead water rescue efforts drawing on internal or other resources as necessary. Maintain arrangements for high volume pumps (HVPs). Develop and promote policy on the use of fire and rescue service resources for pumping operations during floods. See all responders section above for shared roles and responsibilities. 	 Lead the arrangements for water rescue using specialist resources or external assistance, including mutual aid, as necessary. Deploy HVPs and fire and rescue service equipment for flood prevention and/or salvage work in line with service policy. See all responders section above for shared roles and responsibilities. 	 Assist in arrangements for removing floodwater from premises in line with service policy. Reinstate fire and rescue service property or equipment damaged by the flood. See all responders section above for shared roles and responsibilities.
East Midlands / North West Ambulance Services	See all responders section above for shared roles and responsibilities.	 Provide emergency medical treatment for casualties, including those in flooded areas. Arrange with partner agencies to evacuate casualties to hospitals most appropriate means of transport as necessary. Co-ordinate the response of the NHS and private ambulance providers at the scene(s) of medical emergencies. Assist the evacuation of casualties from care homes etc. at risk of flooding. See all responders section above for shared roles and responsibilities. 	See all responders section above for shared roles and responsibilities.



Organisation	Planning	Response	Recovery
Derbyshire County Council (DCC)	 Maintain the arrangements for the countywide tactical command and reserve strategic command at county council HQ. Prepare emergency plans, some jointly with other agencies. Produce maps and other data identifying flood risks from ordinary watercourses and surface water flooding. Arrange clearance of critical assets to water flow on county council owned land and highways. Use permissive powers to carry out enforcement on land drainage problems to the extent set by council policy. Inspect and maintain minor watercourses to the extent set by council policy. Provide limited quantities of free sandbags to the public upon request. See all responders section above for shared roles and responsibilities. 	 Open the countywide tactical command as required. Co-ordinate the local authority and voluntary organisations response. Arrange to implement additional supporting plans eg generic emergency plans, warning and informing, human aspects, mass fatalities and excess deaths, strategic recovery, command and control. Lead in the provision of emergency care for those who have been evacuated or those affected by flooding but remaining in their home. Lead in the provision of short-term temporary accommodation for displaced residents using schools or similar premises. Co-ordinate information on the situation countywide. Attend to highway flooding, carrying out flood alleviation measures such as issuing sandbags, clearance of blocked highway culverts, dealing with flooded roads and traffic diversions (a detailed list of highways actions is given under the National Highways role). Continue to provide public information jointly with other agencies. Liaise with community flood wardens/groups as appropriate. See all responders section above for shared roles and responsibilities. 	 Activate the LRF Strategic Recovery Group if appropriate. Continue to assist in the provision of emergency care for those who have been evacuated or those affected by flooding but remaining in their home. Arrange temporary or permanent re-housing for those in need and without insurance provision of alternative housing. Arrange to repair or reinstate (DCC maintained) highways damaged by the flood. Continue to assist in the arrangements for public information. Carry out duties under the Flood and Water Management Act including Section 19 investigations. Lead the arrangements for longer term recovery in the flood affected areas. See all responders section above for shared roles and responsibilities.



Organisation	Planning	Response	Recovery
Derby City Council	 Use permissive powers to carry out enforcement on land drainage problems to the extent set by council policy. Inspect and maintain minor watercourses to the extent set by council policy. Provide limited quantities of free sandbags to the public upon request. See all responders section above for shared roles and responsibilities. 	 Assist in the provision of emergency care for those who have been evacuated or those affected by flooding but remaining in their home. Assist in the provision of short-term temporary accommodation for displaced residents using schools or similar premises. Attend to highway flooding, carrying out flood alleviation measures such as issuing sandbags, clearance of blocked highway culverts, dealing with flooded roads and traffic diversions (a detailed list of highways actions is given under the National Highways role). Assist with flood alleviation measures such as issuing filled sandbags and attending to land drainage problems. See all responders section above for shared roles and responsibilities. 	 Continue to assist in the provision of emergency care for those who have been evacuated or those affected by flooding but remaining in their home. Arrange temporary or permanent re-housing for those in need. Carry out inspections concerning structural safety or environmental health as necessary, giving advice on problems found. Arrange to repair or reinstate (council maintained) highways damaged by the flood. Arrange special waste collections and the disposal of business and household effects not covered by insurance disposal arrangements. Lead the arrangements for longer term recovery in the flood affected areas. See all responders section above for shared roles and responsibilities.



Organisation	Planning	Response	Recovery
District / borough councils Amber Valley Bolsover Chesterfield Derbyshire Dales Erewash High Peak North East Derbyshire South Derbyshire	 Use permissive powers to carry out enforcement on land drainage problems to the extent set by council policy. Inspect and maintain minor watercourses to the extent set by council policy. Provide information and advice on flooding and business continuity jointly with other agencies. Provide limited quantities of free sandbags to the public upon request (or via county council's scheme). See all responders section above for shared roles and responsibilities. 	 Set up flood protection apparatus for council premises at risk of flooding and arrange to relocate equipment, vehicles and services as necessary. Assist in the provision of short-term temporary accommodation for displaced residents using leisure centres, meeting rooms or similar premises. Assist with flood alleviation measures such as issuing filled sandbags (as per the sandbag policy) and attending to land drainage problems to the extent set by council policy. See all responders section above for shared roles and responsibilities. 	 Continue to assist in the provision of emergency care for those who have been evacuated or those affected by flooding but remaining in their home. Arrange temporary or permanent re-housing for those in need. Carry out inspections on structural safety or environmental health as necessary, giving advice on problems found. Continue to assist in the arrangements for public information. Arrange special waste collections and the disposal of business and household effects not covered by insurance disposal arrangements. Reinstate council property or equipment damaged by the flood. See all responders section above for shared roles and responsibilities.



 Prepare community response/flood plans in conjunction with emergency responders for their area. Encourage local people to become aware of flood risks Prepare community response/flood plans in conjunction with emergency responders for their area. Encourage local people to become aware of flood risks 	Organisation	Planning	Response	Recovery
 Act as a liaison between residents and emergency responders (with the appropriate district/borough council). Encourage local people to take up the responsibilities set out for riparian landowners or the general public. Consider the council holding stocks of sandbags and sand or other flood protection items and resources for local self-help measures. Act as a liaison between residents and emergency responders (with the appropriate district/borough council). Assist responding agencies in the identification of vulnerable people. Contact Derbyshire Police and/or Derbyshire County Council to request closure of flooded roads. 	groupsParish councils	 affect the area. Encourage local people to become flood wardens. Prepare community response/flood plans in conjunction with emergency responders for their area. Encourage local people to become aware of flood risks affecting their home or workplace. Encourage local people to take up the responsibilities set out for riparian landowners or the general public. Consider the council holding stocks of sandbags and sand or other flood protection items and resources for local self-help 	 local radio, EA's Floodline or the EA and Met Office websites. Encourage local people to take precautions appropriate to the current and anticipated situation. Assist with local self-help flood alleviation measures such as the issue of sandbags and other resources (where held). Act as a liaison between residents and emergency responders (with the appropriate district/borough council). Assist responding agencies in the identification of vulnerable people. Contact Derbyshire Police and/or Derbyshire County Council to request 	 advice and information. Represent local people at meetings and forums discussing the flood and recovery work. Assist local people with practical measures to deal with the clean- up and restoration of property where possible. Reinstate parish/town council property or equipment damaged



Organisation	Planning	Response	Recovery
Flood wardens	 Monitor the weather forecast/flood warnings. Liaise with the EA/Derbyshire County Council. Inform the public of flood mitigation measures and self- help available. Monitor local watercourses, drains, gulley's and report any issues to the relevant authority. Attend EA/DCC flood warden training. 	 Advise of EA flood warnings to the public/community Offer advice and information to the public. Assist responding agencies in the identification of vulnerable people. Carry out any actions as identified in any local community flood action plan. Provide vital information to the EA or Derbyshire County Council of watercourse/gulley blockages and any flooded properties. 	 Represent local people at meetings and forums discussing the flood and recovery work. Guide people to sources of advice and information. Assist local people with practical measures to deal with the clean-up and restoration of property where possible.
National Highways (including contractors)	 Identify roads and other assets which are at risk from flooding. Put in place contingency arrangements to minimise the disruption of traffic. Devise strategic road diversions in conjunction with Derbyshire Constabulary, Derby City Council and Derbyshire County Council. See all responders section above for shared roles and responsibilities. 	 Assist with flood alleviation measures on owned roads (sandbags, clearance of blocked highway culverts and traffic diversions). Keep the strategic road network (motorways and trunk roads, including the M1, A38, A50 etc) open where possible and inform professional partners and the public on any closures and possible re opening times. Maintain safe conditions on the roads. Arrange to provide emergency welfare services to motorists stranded on owned roads. Arrange traffic diversions in conjunction with the police and local authorities (highways). See all responders section above for shared roles and responsibilities. 	 Frequently check the condition of owned roads and re-open closed roads when safe to do so. Liaise with the police and local authorities (highways) on the re-opening of closed roads. Provide information to professional partners and the public on roads reopening. See all responders section above for shared roles and responsibilities.



Organisation	Planning	Response	Recovery
Canal and River Trust	 Identify Canal and River Trust canals, reservoirs buildings or other assets which are at risk of flooding. Operate flood control structures (flood gates etc.) at predetermined action levels. Put in place arrangements to mitigate the effect of flooding on Canal and River Trust, buildings etc. Maintain canals, reservoirs and any water control structure (flood gates etc) in safe condition. 	 Continue to operate flood control devices (flood gates, control valves etc.) on Canal and River Trust canals, in line with policy and prevailing conditions. Provide technical information to professional partners and the public on canals closed and possible re-opening times. 	 Frequently check the condition of Canal and River Trust canals and re-open closed canals when safe to do so. NB: The list of responsibilities set out above has been agreed with the Canal and River Trust. Comparable duties would be appropriate for private canal operators.
UK Health Security Agency (UKHSA)	 Prepare advice for the public and health professionals on the effects of flooding and make available via the UKHSA website. Provide public health support and advice to agencies at the local, regional, and national level. Support co-ordination of the NHS response. See all responders section above for shared roles and responsibilities. 	 Monitor the health impact of the floods in relation to infectious diseases and the health effects from exposure to environmental hazards. Identify any emerging outbreaks of infectious diseases and chemical contamination. If required, convene a STAC to provide co-ordinated scientific and technical advice to strategic co-ordination group. Provide public health representatives to STAC. See all responders section above for shared roles and responsibilities. 	 Provide support to NHS England local area teams and ICBS in monitoring the long-term public health effects of flooding if required. Make available any conclusions and advice for mitigating the health effects of flooding. See all responders section above for shared roles and responsibilities.



Organisation	Planning	Response	Recovery
NHS England local area teams	 See all responders section above for shared roles and responsibilities. 	 Co-ordinate the NHS response to flooding. See all responders section above for shared roles and responsibilities. 	 Ensure the continuing recovery of those affected during the flooding. Monitor the long-term health of the public. See all responders section above for shared roles and responsibilities.
Sewerage and water companies • Severn Trent Water • Yorkshire Water • United Utilities • South Staffs Water	 Clear blockages in public sewers and outfall grills. Maintain and repair public sewers. Put in place arrangements to mitigate the effect of flooding on treatment works, pumping stations or other assets. Maintain treatment works, pumping stations or other assets including water control structures (flood gates etc) in safe condition. See all responders section above for shared roles and responsibilities. 	 Set up flood protection apparatus for selected company plant, assets, or premises at risk of flooding and arrange to relocate equipment, vehicles and services as necessary. Inform professional partners and the public of any disruption to service (particularly water supply) and give notice of any alternative supply arrangements. Emergency pumping at failed pumping stations. Repairing burst sewage and water mains. May take action to protect property flooding from public water mains or discharges from sewerage systems. See all responders section above for shared roles and responsibilities. 	See all responders section above for shared roles and responsibilities.



Organisation	Planning	Response	Recovery
Riparian owners / occupiers	 Identify watercourses, drains, culverts, or other assets which could cause flooding. Receive and act upon severe weather and flood warnings. Maintain watercourses, drains, culverts, or other assets including any water control structures (flood gates etc) in a safe working condition. Watercourses and adjacent land should pass on flood flows with minimal obstruction. 	 Stay aware of developing conditions by listening to local radio and/or listening to the EA's Floodline or viewing the EA and Met Office websites. Inform relevant agencies if flooding is occurring or about to occur on watercourses/ drainage assets which are the occupiers' responsibility. Endeavour to keep watercourses, drains, culverts etc free of obstructions and silt if it is safe to do so. 	 Reinstate watercourses, drains, culverts, or other assets damaged by the flood. Report defects/problems affecting adjacent owners/occupiers' watercourses, drains, culverts, or other assets so they can affect repairs. Continue routine maintenance of watercourses, drains, culverts or other assets.
The public	 Monitor the weather forecast and register to relevant EA flood warnings. Make plans to protect their own property. Read public advice available from the EA, local authorities, and other agencies. Also see above if they are riparian owners. 	 Dial 999 if life at risk. Alert neighbours and assist any persons with vulnerabilities. Prevent water from entering property, if possible. Move to a safe, secure area, if possible and safe to do so. Switch off electricity and gas supply at mains. Move valuables above areas liable to flood. Remain vigilant and avoid being put at risk, wherever possible. 	 Attend public meetings. Promote self-help in affected communities. Facilitate the recovery of affected communities. Ensure the welfare of those affected by flooding.



3 Plan activation and response

3.1 Activation of the flood response

The issue of severe weather warnings and flood alerts/warnings do not normally trigger a major response automatically, a smaller scale response may be appropriate. Some organisations have pre planned actions, but many others respond to requests for assistance as they arise.

The situation escalates when widespread problems become evident or flood warnings and/or severe flood warnings are issued. At that time, formal command and co-ordination arrangements are put in place, see <u>page 30</u>.

Activation procedure

The triggers are summarised below:

Trigger	Response
ALERT	 Raised awareness by responding agencies including: Monitoring EA and Met Office websites and hazard
Receipt of severe	manager for updates.
weather alerts for	- Distribution of alerts within responding agencies.
heavy	- FAS email alert and communication with local EA, Met
rain/thunderstorms	Office and Flood Forecasting Centre representatives.
(issued more than	- Encourage the public to remain aware of the
24 hours ahead).	 developing situation and prepare for possible flooding. DCC and EA Liaison with local flood wardens.
and/or	
	NB: On receipt of yellow level warning on FGS identifying
Flood Alerts	Derbyshire at risk, the Derbyshire County Council Emergency Planning Team will consider the following
and/or	factors:
and/or	Timing/day/weekend.
Flood Guidance	 Current ground conditions.
Statement (FGS)	 Localised warnings.
YELLOW	Emergency planning to lining with DCC flood risk
(low risk).	Emergency planning to liaise with DCC flood risk management team, highways hub and communications as appropriate.
	 Responding agencies may undertake preliminary actions including:
	- Checking staff and resource availability.
	- Inspecting drainage assets eg culverts and flood
	control structures and clearing where necessary.
	- Filling sandbags for possible use.
	 Encourage the public to remain aware of the developing situation and property for passible floading
	developing situation and prepare for possible flooding.



Trigger	Response
WARNING Receipt of severe weather warnings for heavy rain/thunderstorms (issued less than 24 hours ahead).	 Raised awareness by responding agencies including: Continue monitoring EA and Met Office websites and hazard manager for updates. Distribution of warnings within responding agencies. Flood Advisory Service (FAS) teleconference communication with partners to provide an early understanding of flood risk and advice (see page C21). Continued liaison with local flood wardens.
and/or Flood Warnings and/or Flood Guidance	 Some organisations have specific checks/maintenance work to carry out on receipt of specific warnings. NB: On receipt of Amber level warning on FGS identifying Derbyshire at risk, the Derbyshire County Council Emergency Planning Team will co-ordinate an assessment meeting involving DCC highways hub, flood
Statement (FGS) AMBER (medium risk).	 assessment meeting involving DCC highways hub, flood risk management team and communications and consider need for multi-agency tactical meeting. See typical response actions on page 22. Most organisations increase preparedness and check resource availability in case situation deteriorates.
	 If the situation is expected to be particularly bad, standby arrangements for staff and other resources may be activated.
	 Flooding can often be localised but may affect many places simultaneously.
	 Services respond to flood incidents using normal mechanisms unless the situation deteriorates, requiring multi-agency command structure to be established (SCG/TCG).
	 Encourage the public to remain aware of the developing situation and prepare for possible flooding.
	Some organisations take special measures to protect their own premises/services.
	 Flooding is now generally disruptive across the city and/or county area and very disruptive in the worst affected locations.



Trigger	Response
SEVERE WARNING	 EA, riparian landowners and some councils: continue inspections of culverts and flood control structures.
Severe flood warning(s) issued (indicate a worsening situation for any flood risk area	 continue to operate selected flood control mechanisms. Specific command structures (strategic/tactical) established, if not already operating. Situation reports are compiled on a regular basis, some forwarded to the DLUHC RED, sometimes at government request.
where there is deemed to be a significant threat to life).	 Public information is increased to include details of affected locations, road closures, closure of public buildings and/or alteration to normal services, loss of utility services etc.
Flood Guidance Statement (FGS) RED (high risk).	 Staff and other resources are redeployed to enhance response capability. Consider requesting military assistance via Joint Regional
Decision to issue made through discussion with tactical agencies. The EA reserves the right to issue in an emergency.	 Liaison Officer (JRLO) Additional staff and/or resources are obtained to meet increasing demand.



Trigger	Response
Trigger Receipt of requests for sandbags or to attend blocked drains or property flooding.	 LOW or MODEST numbers Organisations respond to flood incidents using normal mechanisms, specific command structures are not usually established unless the situation deteriorates, requiring multi-agency command structure to be established. The exchange of information between partner agencies is
	 enhanced to deal with the incidents. Consideration is given to possible worsening of the situation and subsequent actions necessary. HIGH Numbers Organisations are now unlikely to be able to meet the demands for flood response using normal mechanisms. The exchange of information between partner agencies is enhanced to deal with the incidents. Consideration is given to setting up formal command structures (SCG/TCG) to deal with the situation. In-house control rooms are often in operation or set up to respond to the situation. Staff and resources are redeployed to enhance response capability. Additional staff and/or resources are obtained to meet increasing demand.
	Some organisations begin taking special measures to protect their own premises/services.

Typical response actions

These responses are normally reactive to requests from the public.

There have been requests to remove debris trapped under bridges during floods but the danger to life posed to highway teams' precluded action on some occasions. Debris is removed after the flood if necessary.

Request	Action
Risk assessment and resource requirements	 Derbyshire County Council Emergency Planning Team assessment checklist. Consider the following: Severe weather warnings and met office PWS emails. Flood Guidance Statement (FGS) Current situation including ground conditions. Facilitating meeting with relevant DCC departments Previous known flood risk locations including as a minimum:- Bradwell / Breadsall / Bonsall / Findern / Ockbrook Other known problem areas identified under county and city LLFA responsibilities. Refer to individual annexes for other locations.



Request	Action
Sandbags to prevent/reduce flooding	Sandbags are provided where resources permit according to the local authorities' sandbag policy (see page D1 for details). Local schemes to provide sandbags eg parish council arrangements are activated as necessary. Arrangements to supply small quantities of empty sandbags upon request prior to flooding.
Blocked drains/gulley's	Water company or highways authority attends where resources permit, but some problems are resolved after the flood. Often sandbags are requested as a temporary flood defence measure.
Water running off land or surface water building up	Where available land drainage officers are requested to attend, sometimes after the flood, to investigate and/or enforce remedial action. DCC as LLFA will investigate if five or more properties are flooded. Often sandbags/Floodsax are requested as a temporary flood defence measure.
Debris in watercourses, sometimes obstructing bridges or culverts	DCC as LLFA will investigate if five or more properties are flooded and/or referred to the EA or land drainage officers for respective water responsibilities to investigate, clear or enforce remedial action on riparian landowner as needed.
Roads impassable due to flooding	Road closures implemented using vehicles, people or signs where resources permit.
Rescue of people trapped by floods	Rescue (usually lead by the fire and rescue service or the police) is carried out using boats, high clearance vehicles and occasionally helicopters.
Rescue of animals stranded by floods	Rescue (often lead by the fire and rescue service) is carried out where resources permit using boats/buoyancy aids or referred to the RSPCA water rescue team.
Displaced residents with no accommodation (those who are unable to make their own arrangements for alternative accommodation)	Temporary accommodation provided using designated rest centres or hotels (dependant on numbers evacuated).
Commuters/travellers unable to complete their journey (those who are unable to make their own arrangements for temporary accommodation)	Public transport operators arrange alternative services where possible or provide welfare and/or temporary accommodation. Temporary accommodation is sometimes provided using designated rest centres.



3.2 Response of selected agencies to flood alerts and flood warnings

The detailed actions of those councils which have their own specific duties for responding to flood warnings are given below:

Amber Valley Borough Council

The borough council has the following arrangements in place to respond to flooding:

Receipt of flood warnings for locations in the borough on:	Action
 River Amber Bottle Brook River Derwent River Erewash 	 Prepare a stockpile of sandbags and distribute to known key locations in line with current sandbag policy. Respond to calls for assistance.
 Rivers Ecclesbourne and Derwent (Duffield). River Erewash (Langley Mill). 	 Open the incident room at HQ. Respond by distributing further sandbags in line with current sandbag policy.

Chesterfield Borough Council

CBC has the following arrangements in place to respond to flooding, see CBC Flood Contingency and Emergency Response Plan Rev R October 2022.

Flood alerts, flood warnings and or severe flood warnings along with severe weather warnings and flood guidance statements are received by telephone and email within engineering services. Messages received should be passed to either the senior engineer or project engineer who will become the acting senior operations officer.

The senior operations officer is responsible for ensuring the following measures are carried out:

- Monitoring the warning(s) using the EA's Floodline or website and monitoring weather forecasts.
- Check the EA's website for details of areas considered to be at significant risk of flooding.
- Inform the environmental services supervisor and/or depot foreman of the alert/warning and ask for an appropriate supply of sandbags to be filled. The depot foreman may wish to consider obtaining additional staff if required. The number of sandbags may need to be increased if the EA considers the risk of flooding to be high.
- The environmental services manager/depot foreman may wish to consider obtaining additional staff if considered necessary.



- Refer the public to the EA's Floodline for up to date information. If appropriate, arrange for sandbags to be provided to afford some protection to properties.
- Consider sending engineering services staff to inspect and report on the situation in flood risk areas.
- Inform the EA incident communications centre (if area incident room is not open) of any significant flooding from rivers or watercourses.
- Continue monitoring. If a Flood Alert is upgraded to a Flood Warning, contact either the senior engineer or design engineer. If the situation deteriorates and/or evacuation of dwellings looks likely, consideration needs to be given to review whether to recommend the borough council's emergency plan is invoked.
- If the borough council's emergency plan is invoked, the flooding incident will be treated like any other emergency plan incident with the borough council's emergency control centre opened up.

Derbyshire Dales District Council

The EA has an MOU with DDDC to carry out specific duties at pre-determined river levels. Some actions are triggered by flood warnings while others are specifically requested when rivers are forecast to reach certain levels.

The actions include:

- Check the route of selected watercourses and clear obstructions as necessary.
- Check trash screens of certain culverts and clear debris as necessary.

When flooding of land around Bakewell is predicted:

- Three manholes and grids to be lifted on Bakewell recreation ground. Orange fencing to be erected around each manhole and grid when opened.
- One flood barrier and two associated footpath closed signs to be erected in Bakewell on the footway between Wye Bank and the recreation ground.
- Three flood barriers and six associated footpath closed signs to be erected in Bakewell at the old iron bridge and riverside crescent.

Erewash Borough Council

Will instigate flood control procedures when flood alerts are issued for the following:

- Lower River Derwent in Derbyshire.
- River Erewash in Derbyshire and Nottinghamshire.
- River Trent in Nottinghamshire (includes those parts of the river flowing thorough the Borough).

NB: In addition to the above all district and boroughs to adhere with the roles and responsibilities outlined on page 13.



3.3 Mutual and Military aid arrangements

Mutual aid

Mutual aid should not be relied upon as key equipment and personnel could be in high demand. It is probable that other LRF/Resilience Partnership areas in the East Midlands (and indeed the UK) will be involved in their own emergency response. Some agencies have long standing national schemes in place while others operate on an ad-hoc or informal basis.

There are several arrangements in place:

Agency	Arrangement
Police	 Nationwide mutual aid arrangements via the National Police Co-ordination Centre (NPoCC). Cross border assistance is frequently provided for minor incidents close to force boundaries.
Fire and rescue service	 Nationwide mutual aid arrangements via the National Resilience Fire Control (NRFC). National deployment arrangements for National Resilience equipment/capabilities (eg HVPs, SRTs). Regionally based control vehicles to co-ordinate National Resilience equipment/capabilities when deployed. Cross border assistance is frequently provided for minor incidents close to service boundaries.
Ambulance service	 Nationwide mutual aid arrangements. Cross border assistance is frequently provided for minor incidents close to service boundaries.
Local authorities	 Formal mutual aid agreement between county and city/district/borough councils in Derbyshire. Several mutual aid agreements are in place and others are being sought between Derbyshire County Council and adjacent upper tier local authorities outside the east midland's region. Agreement is in place between upper tier local authorities within the east midland's region. Some district/borough councils in Derbyshire have bilateral arrangements with neighbouring district/borough council in adjacent county areas.
Environment Agency	• Arrangements to temporarily transfer staff and equipment to other regional or area offices experiencing resourcing difficulties.
Utility companies	Arrangements to temporarily transfer staff equipment and spare parts within each company and between companies.



Requests for mutual aid should be routed via SCG unless other systems are in place such as the internal arrangements operated by the emergency services.

Other requests for mutual aid from organisations outside the East Midlands should be sent via DLUHC RED or any multi-agency SCG/Response Co-ordinating Group (ResCG) arrangement setup by DLUHC.

Military aid

The SCG may request military assistance under the arrangements for 'Military Aid to the Civil Authorities' (MACA). This should only be done when the SCG assesses the civil resources available locally are inadequate to save life and/or alleviate distress. Before any request for MACA is made, the Armed Forces Joint Regional Liaison Officer (JRLO) for the East Midlands should be consulted.

The Armed Forces possess a diverse range of skills and specialist equipment, but the availability of these resources cannot be guaranteed. It is essential the SCG and TCG do not formulate plans on assumptions of military assistance. Any requests for assistance should focus on the specific capability required. The military response will be determined by the availability of resources and the military commander's judgement.

It is often impossible to predict with any accuracy the cost of Armed Forces support. No matter how valid a request for assistance may appear, Defence funds are granted for Defence purposes and the Ministry of Defence must seek reimbursement for any costs incurred. In exceptional circumstances costs may be waived. This decision would normally be taken by Government.

3.4 Evacuation and shelter arrangements

Evacuation may be necessary during a flooding emergency. The LRF Human Aspects Plan sets out the arrangements for the evacuation of people in emergencies and the provision of temporary shelter. Some premises designated as rest centres are themselves at risk from flooding, and details of these are contained in the flood risk annexes.

In some cases, residents may only be able to evacuate if they are rescued ie by boat. Close liaison will need to take place between those coordinating water rescue and those coordinating evacuation.

The police do not have any powers to force people to evacuate in any emergency (other than terrorism threat), and for flooding incidents in particular, residents may prefer to move upstairs, if they are able to, rather than leave their homes. Residents who do decide to stay in their home may be vulnerable/become vulnerable and where possible this should be recorded as they may require additional support.

It should be borne in mind when planning evacuation and shelter, figures provided by the EA in Flood Plan Annexes, are for the number of properties potentially at risk and not numbers of people. Many people may self-evacuate to family and friends.



If numerous residential/ business properties have been evacuated in a particular location, and may be empty for some time, it may be necessary for security issues to be considered by the TCG, and arrangements made for security provision i.e. visible.

Vulnerable people

Information on vulnerable people can be requested from LRF organisations during floods and other incidents under the data sharing (vulnerable people) agreement. The flood plan annexes contain lists of special consideration premises in each local authority area.

3.5 Traffic management

Road closures

Traffic management for individual road closures is well established with co-operation between the police and appropriate city or county highways authority or National Highways if trunk roads or motorways are involved.

Highways teams receive flood and weather warning messages directly so can respond as required, based on roads identified at risk in the messages and accumulated local knowledge. The main response is to clear blocked gullies and culverts (where this can be done safely) and set up road closed or flood signs to deter motorists and pedestrians from entering flood water and becoming stuck. Details of roads that are most at risk of flooding are included in the flood plan annexes listed under transport.

During widespread floods, there can be a shortage of signs due to the large number of roads affected. The demand for gully clearing often exceeds the available resources during the earlier phases of a flood incident.

Information on roads and other transport links at risk of flooding is included in the flood risk annexes for each local authority area. Flood alerts/ warnings now include specific details of when certain roads or transport links are at risk from flooding.

Stranded travellers

As highlighted during the flooding in June 2007, commuters and travellers may be unable to complete their journey either within, or travelling through the county, due to flooding, road closures and traffic congestion. For those unable to make their own arrangements for temporary accommodation local authorities in conjunction with other agencies will make appropriate welfare arrangements.

3.6 Recovery arrangements

The Derbyshire LRF Strategic Recovery Plan sets out the arrangements for recovery.



3.7 Emergency Alert

Currently only being used by the Environment Agency for serious flood emergency alerts.

What is an **Emergency Alert**

In the UK the Cell Broadcast service will be known as **Emergency Alerts**. Emergency Alerts is a new warning and informing tool to help reach people whose lives are at risk in an emergency quickly and directly.

- Cell broadcasts are a way of transmitting Emergency Alerts messages to mobile phones in a location via mobile phone towers.
- The phone uses a reserved tone and vibration to attract attention, users must acknowledge them.
- Alerts do not require registration and the broadcast is one-way.
- Like a radio broadcast, the message will be left 'playing' for a defined time period so that anyone in the area or travelling through will receive the message.

When an emergency alert is issued it is rapid, enabling millions of handsets to receive messages simultaneously within seconds.

THRESHOLDS: Before you agree to send an alert, you need to be content that the following thresholds have been met:

- Lives are at risk in an emergency;
- The risk covers a defined geographical area
- Those receiving the message need to take a clearly defined action;
- There is some urgency to taking action there may be some warning or it needs to be immediate but this isn't for long term or general risk, must be specific.

The current process for issuing an alert:

- Incident lead (TCG/SCG representative, Gold Command, etc) identifies benefit of an emergency alert. Command group agree content of alert, aligned to wider public communications
- Requesting agency calls the watchkeepers (WKs) requesting the release of a message, using the checklist to shape and convey their message
- WKs receive the message, referring to the checklist. You will need to stay on the line whilst this happens
- The COBR Unit Duty Director will review and approve for release



4 Command and co-ordination arrangements

Dealing with major flooding incidents employs the generic national framework of command and co-ordination using strategic, tactical, and operational levels as set out in the following documents:

- JESIP.
- SCC Activation Plan.
- Major Incident Procedures incorporating Strategic and Tactical Management Guide and JESIP principles.

For major flood incidents, it is anticipated that:

- Strategic command will be established at Police HQ, Ripley.
- Tactical command (countywide) will be established at County Hall, Matlock.

Suggested operational incident command posts have been listed in the flood risk annexes for groups of flood warning areas or flood risk areas. Depending on the extent of flooding there could be numerous established.

4.1 Airwave inter-agency communication

The protocol for Airwave inter-agency communication is outlined in the LRF Major Incident Procedures incorporating Strategic and Tactical Management Guide and JESIP principles.

To ensure tactical and operational efficiency of response to a major incident, the emergency services, together with Category 1 and 2 responders should ensure that they are able to communicate with each other. This is especially relevant to tactical (incident) commanders.

Agencies using Airwave radio communications have the facility to access multiagency talk groups which can be used by other emergency services and partner responding agencies. This enables ongoing inter-agency communication.



Appendix A - Action sheets

Police action sheet

Force operations room

- Be aware of current flood warning messages. Liaise with DCC/Derby City Highways to maintain awareness of road closures and diversions affecting resource deployment. The police have a MOU with Derbyshire County Council Highways, the aim of the protocol is to speed up the liaison between the Councils Highways Team and the Police Call Centre. This enables officers to minimise waiting time for requests for help and getting resources on the ground.
- 2. Considering the area at risk of flooding deploy an officer to a suitable location for the FCP/RvP (if necessary). Upon confirmation of arrival, advise him/her of the actions numbered 1 to 7 on page A3.

If required ensure the FCP/RvP is safe from flooding and access/egress routes will be unaffected by rising water levels. Suggested control points for worst case events are given in the flood risk annexes.

- 3. Deploy resources to road diversions and other traffic points considering flood risks and safe routes (replace officers with road closed signs from Derbyshire County Council / Derby City Council or National Highways as soon as possible).
- 4. Deploy an incident commander to the incident command post (supervisory any rank). Upon confirmation of arrival advise him/her of the actions numbered 1 to 16 on page A4.
- 5. Notify services, command personnel, etc. as per list below.

Not	Notify	
1.	Fire and rescue service (Confirm aware) via the Emergency Services Inter- operability talk ground ESICTRL and monitor for updates.	
2.	Ambulance service (Confirm aware) via the Emergency Services Inter- operability talk ground ESICTRL and monitor for updates.	
3.	Force Incident Manager (FIM).	
4.	Convey the call to Derbyshire County Council's Emergency Planning Team and provide a situation reporting using M/ETHANE.	
5.	National Highways if applicable – contact regional control centre *** (ex-dir.).	
6.	FIM to consider notifying duty critical incident manager (CIM) for escalation.	



7.	Communications Tactical Advisor (CTA).
8.	Media relations officer.

Consider		
1.	Trafficlink	
2.	Additional call handling staff.	
3.	 Use of National Police Air Service (NPAS) / Drone Unit for: Aerial surveillance of scene Assisting the police incident commander Skyshout public warning (NPAS only) 	
4.	Telecoms on-call in respect of communications support – mobile communications / command vehicle (mobilised through force operational / emergency planning). (Telecoms call-out rota accessed by force operations room).	
5.	Notifying adjacent divisions – additional personnel.	
6.	Activating business continuity arrangements if police premises are at risk from flooding.	
7.	Use of Derbyshire Alert community messaging system through police media officer.	
8.	Casualty bureau. In the cause of large casualty numbers potential fatalities and people unaccounted for.	
9.	Police documentation team(s) for the hospital(s) designated by the ambulance service, as well as any family and friends reception centre/survivor reception centre which are established in respect of the incident.	
10.	Senior detective on-call re senior investigating officer and teams.	
11.	Assets duty manager in respect of any logistics support (call-out rota accessed by force operations room.	
12.	Consider activating the Resilience Communications Plan (MTPAS).	



13.	Consider contacting Operational Planning Sergeant for staffing requirements.
14.	Consider contacting Operational Support Inspector to identify and staff suitably trained to assist with rescue/recovery on call or off duty.

First officer at the forward command post (if required)

- 1. Establish the FCP/RvP as directed by the force operations room and provide an initial situation report using M/ETHANE.
- 2. Commence a log of events.
- 3. Establish liaison with the fire and rescue service, ambulance service and any other responding agencies personnel to determine severity of the incident and any necessary action using JESIP.
- 4. Continually update force operations room with details of the incident.
- 5. Establish communications at the FCP.
- 6. Brief the police incident commander on their arrival.
- 7. Assist the police incident commander.

Poli	Police incident commander		
1.	Report to the FCP/Rvp (If established) as directed by the force operations room.	Police	
2.	 Maintain liaise and co-ordinate the response with all responding agencies' incident commanders using JESIP/Joint Decision Model (including cross boundary agencies). Establish an on-site command structure ensuring site representative(s) are included and all incident commanders are identifiable. Ensure all decisions made at the scene are recorded in line with organisational policy. Consider declaring a major incident (if not already) – single/multiple service and notify control rooms to ensure it's cascaded to all responding agencies. 	All	
3.	Ensure vehicular safe access/egress is maintained to the scene/site.	All	



4.	Ensure all responding agencies are made aware of any specific/general hazards at the site.	All
5.	Ensure all commanders are on the interagency talk groups. Contact a communications tactical advisor to discuss appropriate talk groups.	All
6.	Establish the requirement for the necessary road blocks around the site.	Police
7.	Ensure sufficient resources are deployed and consider specialist capabilities for managing the consequences e.g. drones.	All
9.	 Consider the environmental response: Make use of any on-site interceptors/containment systems/bunds with liaison with the site representative(s) and the Environment Agency. 	Fire/Site/ EA
9.	Identify Ambulance loading points/casualty clearing station ensuring vehicle ingress/egress.	Ambulance
10.	Liaise with the site representative/ medical incident adviser to determine the appropriate treatment regime for patients from the site.	Ambulance
11.	Consider safe casualty retrieval/decontamination.	Ambulance
12.	Brief and maintain contact with the tactical co-ordinating group if established.	All
13.	Control the press/media, request the attendance of Derbyshire Constabulary's media officer if necessary. • Consider/identify a media holding area nearby.	Police
14.	Consider implementing an evacuation if necessary and appropriate, in liaison with the fire and rescue and ambulance services incident commanders and the local authorities emergency planning team. (If the decision is made to evacuate appoint an evacuation officer.)	Police
15.	Consider the extend and type of decontamination required for the responding agencies.	All
16.	Consider what action should be taken to communicate the all clear message to the public.	Police lead/ All

Fire and rescue service action sheet

Fire	Fire Control	
1.	Be aware of current flood warning messages. Maintain awareness of road closures and diversions affecting resource deployment.	
2.	Respond to calls.	
3.	Inform duty officer, duty strategic manager and duty principal officer.	
4.	Communicate with police and ambulance controls for information sharing and attendances at RvP.	
5.	Communicate with EA.	
6.	 Liaise with Derbyshire County Council's Emergency Planning Team for: advice equipment resources facilities for any evacuees. 	
7.	Liaise with electricity supply companies for confirmation of safe areas of work.	
8.	Consider officers to attend TCG/SCG if established.	
9.	Consider business continuity arrangements to retrieve essential equipment and transfer vehicles/staff to safe locations if service premises are at risk from the flood.	



Fire	Fire and rescue incident commander		
1.	Report to incident or FCP/RvP (if established) as directed by fire control.		
 Consider the following: The use of inter-agency radio communications with the p ambulance service incident commanders. Agencies using airwave radio communications have the ability multi-agency talk group(s) which can be accessed by oth services enabling the various agencies to communicate. invoke this procedure can be found in the Major Incident incorporating Strategic and Tactical Management Guide principles. Advice should be sought from a Communicati Advisor (CTA). Primarily the following talk groups are available for use: 		dent commanders. o communications have the ability to request a b(s) which can be accessed by other emergency arious agencies to communicate. Details of how to can be found in the Major Incident Procedures and Tactical Management Guide and JESIP uld be sought from a Communications Tactical	
	*****	Sharers hailing group	
	****	For tactical inter-agency communication	
	****	For operational inter-agency communication For operational inter-agency communication For operational inter-agency communication and for Multi-Agency incidents the designated air to ground talk group	
	****	For air to ground communication (Police only radio channel)	
	*****	All users inter-agency talkgroup	
	****	Emergency services inter control talkgroup (control rooms only)	
3.	Make an initial situation report to fire control using M/ETHANE, and confirming resources required.		
4.	Save life and rescue casualt	ies or persons stranded by flood.	
5.	Prevent further escalation of incident.		
6.	Deal with other hazards from fire, chemicals, escaping gas, electricity supply etc.		
7.	Monitor safety of all personnel at scene of operations.		
8.	Consider the environmental effects and possible actions to minimise ie environmental risk assessment.		
9.	Keep fire control up to date on developments.		



10.	Monitor the welfare and support of crews on scene and arrange relief's as necessary.
11.	Establish effective communication links between the incident ground and tactical and strategic command.



Ambulance service action sheet

Ambulance service emergency operations centre (EOC)		
1.	Be aware of flood warning messages. Maintain awareness of road closures and diversions affecting resource deployment.	
2.	Triage and arrange response to 999 requests related to flood situation.	
3.	Share any relevant information with other emergency services and confirm M/ETHANE.	
4.	Inform appropriate resources of developing situations and gather local intelligence from staff. Details of some vulnerable premises and rendezvous points are given in flood risk annexes of this plan.	
5.	Inform on duty divisional Tactical Commander and divisional Senior Manager on-call of any flood related concerns. Where required mobilise an ambulance manager as incident commander. Upon confirmation of arrival advise them of the actions numbered 1 to 17 on page A9.	
6.	Notify the ambulance service on-call NILO/resilience manager.	
7.	Communicate information to Derbyshire County Council's Emergency Planning Team.	
8.	Inform the on-call manager(s) for United Kingdom Health Security Agency, NHS England and Derbyshire Integrated Care Board	
9.	Activate flood/major incident plans in response to actual incidents with due regard to assisting with vulnerable patients.	
10.	Notify the EMAS on call communications team regarding warning and informing press release in conjunction with partner agencies.	

Cor	Consider	
1.	Activating major incident plan/notify National Ambulance Co-ordination Centre (NACC).	
2.	Mobilisation of the Hazardous Area Response Team (HART) resources to support multi agency water rescue.	



- 1

3.	Use of boats, inflatable pathways (by appropriately trained staff), specialist vehicles, air ambulances or other helicopters etc (provided by other services as necessary) to reach stranded/isolated casualties.
4.	Mobilisation of Special Operations Response team (SORT) to provide incident support and decontamination capabilities.
5.	Mobilisation of incident support units.
6.	Mobilisation of additional medical support teams if required.
7.	Notifying NHS England North Midlands on-call to request mobilisation of patient transport service providers to assist with movement of vulnerable people.
8.	Despatch liaison officers to designated hospitals or other appropriate locations
9.	Business continuity arrangements to retrieve essential equipment and transfer vehicles/staff to safe locations if service premises are at risk from the flood.

Am	Ambulance service incident commander				
1.	Report to the FCP/RvP (if established) as specified by ambulance service EOC.				
2.	Gain update from the first response on scene.				
3.	Make an initial solution report to EOC using M/ETHANE.				
4.	Identify the rendezvous point (RvP) if not already agreed and follow the relevant NARU Action Card.				
5.	Co-Locate with or establish contact with the police and fire and rescue service incident commanders and other responding agencies in line with JESIP. Ensure adequate methods of inter-agency communication and decision making (joint decision model) are utilised.				



Agencies using airwave radio communications can request a multi-agency talk group(s) via Derbyshire Police, which can be accessed by other emergency services enabling the various agencies to communicate. Details of how to invoke this procedure can be found in the LRF Major Incident Procedures incorporating Strategic and Tactical Management Guide and JESIP principles.

****	Sharers hailing group
****	For tactical inter-agency communication
****	For operational inter-agency communication For operational inter-agency communication For operational inter-agency communication & for Multi-Agency incidents the designated air to ground talk group
*****	For air to ground communication (Police only radio channel)
****	All users inter-agency talkgroup

Primarily the following talk groups are available for use:

6.	Commence ambulance service incident log.
7.	Formulate plans to deal with local issues for retrieval of vulnerable people, sick and injured.
8.	Feedback information to the EOC regarding incident and problems being faced or anticipated.
9.	Maintain communication with ambulance crews and health service staff around flood area.
10.	Formulate safety and risk assessment plans together with other services.
11.	Ensure the attending ambulance staff are informed of any specific/generic hazards at the site and the location of the RvP .
12.	Hold regular briefing sessions (using the IIMARCH format) with the police and fire and rescue service incident commanders and any other agencies involved using the JESIP principles and share information with tactical command.
13.	Consider implementing evacuation or shelter in liaison with the police and fire and rescue service incident commanders and the county council's emergency planning team. Advise on specialist transportation where appropriate, e.g. nursing homes etc.

14.	Agree to support the provision of information (Warning and Informing messages) to the responding media via EMAS communications team and other agencies.
15.	Instigate the EMAS Major Incident Plan and instigate the relevant Command Structure as per the EMAS Command and Control policy.
16.	As the incident progresses, maintain contact with the EOC and provide updated M/ETHANE report as and when necessary.
17.	At the end of the incident complete log and forward to ambulance service resilience team.



Derbyshire County Council's Emergency Planning Team action sheet

Action sheet for a major flooding incident

- 1. Open the emergency command centre ECC (if not already open) and consider requesting an initial TCG:
 - Set out the room in accordance with the emergency centre procedures (NB: also refer to the SCC Activation Plan if it is to be used for strategic command).
 - Arrange staffing for the ECC and office.
 - Consider utilising teleconferencing/virtual meetings. COVID-19 has shown that an effective response can be conducted via MS Teams.
 - Consider recalling staff working at other locations back to the office or directing them to incidents or meetings.
 - Assign manager/officer to oversee and prioritise requests for assistance and allocate accordingly.
 - Setup process for new requests, pending and completed by district / borough / city.
 - Suggested TCG attendance list and agenda is kept in H:\Resilience and Response\Incidents\Templates.
- 2. Commence recording details of the incident:
 - Receive and record calls (using a flood incident form) for assistance and prioritise them.
 - Allocate resources and/or refer matters to the appropriate agency for action/resolution.
 - Co-ordinate the multi-agency response.
 - Record flood warnings in force on the board in main office.
 - Read the text of emailed flood alerts and flood warnings and note separately any specific areas, roads at risk and/or number of properties at risk.
 - Maintain awareness of road closures and diversions affecting resource deployment.
 - Requests for assistance received via Call Derbyshire will be sent by email to the emergency planning generic email address and may be printed off and saved rather than copying details on to a flood incident form.



- 3. Request liaison officers from the following (if appropriate) to attend the ECC or to dial in via teleconference/MS Teams if TCG being established:
 - Emergency services.
 - Environment agency (EA).
 - City/district/borough councils (emergency planning staff can act as liaison officers on behalf of their allocated local authority).
 - County council departments (eg highways hub, flood risk management, communications, adult social care, countryside service).
 - Utility companies (water, power).
 - Canal and River Trust.
 - Public transport operators.
- 4. Inform the following organisations as appropriate when the ECC is established:
 - Emergency services control rooms.
 - EA (all four area offices/incident rooms).
 - County council departments.
 - City/district/borough councils.
 - DLUHC RED.
 - UK Health Security Agency (UKHSA).
 - Utility companies.
 - Military.
- 5. Consider the use of Call Derbyshire to assist facilitating a response to requests for assistance from the public (and similar arrangements for the city if appropriate):
 - Ensure the operators are briefed and updated.
 - Some generic information has already been provided to the call centre managers.
 - Consider providing information to other agencies call centres.
- 6. Establish communications with external agencies, especially where no liaison officer is available to attend the ECC.
 - Confirm or exchange liaison contact details.
 - Consider using conference telephone calls or alternative communication tools to exchange information with external agencies (email/RD).

- Remember that some organisation's email arrangements restrict the size of messages and attachments which may limit the sending of maps or other large files.
- Consider the use of Airwave radio terminals for communication with emergency planning staff deployed at incidents if other communication facilities are compromised.

Agencies using Airwave radio communications can request a multi-agency talk group(s) which can be accessed by other emergency services enabling the various agencies to communicate. Details of how to invoke this procedure can be found in the LRF Major Incident Procedures incorporating Strategic and Tactical Management Guide and JESIP principles.

*****	Sharers Hailing Group
****	For tactical inter-agency communication
****	For operational inter-agency communication For operational inter-agency communication For operational inter-agency communication & for Multi-Agency incidents the designated air to ground talk group
****	For air to ground communication (Police only radio channel)
*****	All users inter-agency talk group
****	Emergency services inter control talkgroup (control rooms only)

Primarily the following talk groups are available:

- 7. Notify:
 - County and city social care functions.
 - Director of public health for Derbyshire County and Derby City councils.
 - Cabinet member/portfolio holder.
 - Director of Highways.
 - Executive Director of Place.
 - City and district/borough communications officers.
 - Local elected member(s) of affected areas, if possible.
- 8. If requested arrange for rest centre(s) or alternative to be opened and staffed.
 - There are control points and rest centres suggested for some flood risk areas see flood risk annexes of this plan. Control points are only identified where significant numbers of property are at risk.
 - Deploy emergency planning staff/DEV to rest centre(s) in line with the rest centre procedures.



- Refer to action lists within the Human Aspects Plan.
- 9. Alert any special considerations in the affected area(s) using specific flood plan annex eg schools or residential care homes and liaise with social care regarding the care of vulnerable people.
 - There are vulnerable premises noted for most fluvial (river) flood risk areas in the associated flood risk annexes of this plan. Consider the priority for attention/evacuation of the range of premises at risk in relation to anticipated water levels.
- 10. Arrange for resources to be made available for the emergency services or other agencies on request:
 - See appendix D of this plan and the separate resources list.
 - Empty sandbags are available from the emergency planning store at county hall to assist county departments and other local authority sandbagging operations.
 - Consider ordering additional sandbags at an early stage to secure delivery whilst stocks remain at suppliers.
 - Consider obtaining boats or other access equipment in response to requests from the emergency services
- 11. Establish mutual aid arrangements with district/parish councils for the supply of sand and sandbags etc:
 - Individual community resilience/flood plans have parish council contact and local resource details.
 - The current list of parish/town councils with sandbags is listed in the local authority sandbag part of appendix D of this Plan.
- 12. Liaise with:
 - EA and Met Office see below.
 - Flood wardens.
 - Utility companies regarding the effect on their services.
 - Canal and River Trust regarding their canals/navigable rivers in flood affected areas.
 - DLUHC RED who may request regular situation reports.
- 13. Check the status of flood warnings and severe weather warnings:
 - Check the <u>EA website</u> for flood alert/warning updates. Situation reports should be obtained by contacting each EA area office or incident room directly or use EA liaison officers in the emergency centre to obtain details.
 - The EA and/or FFC will issue summaries of flood warnings in force.



- Use the Met Office hazard manager service to view severe weather warnings, rainfall radar images and flood guidance statements.
- Situation reports should be obtained from the Met Office via the PWS Advisor or the Environment Monitoring and Response Centre.
- Use the flooding/weather situation updates to inform future actions or responses.
- 14. Consider presenting consolidated information about the situation, liaising with partner organisation to collect facts as necessary:
 - Setup warning & informing cell to issue press releases and media briefings in conjunction with communications staff, utilising social media.
 - Encourage people to obtain up to date details on flood warnings and other advice from the EA.
 - Advise on areas at particular risk based on EA or other reliable information.
 - Give generic advice on what to do in flood emergencies (link to website resources and information at libraries).
 - Advise where public sandbag collection points have been established (and whether they are filled or empty sandbags).
 - List known road closures (On DCC and/or Derby City websites).
 - Advise on disruption to transport services where known.
 - List community premises which are closed such as libraries, schools etc.
 - Advise on any limitation or failure of utility supplies where known.
 - Present information on the websites of the LRF (Derbyshire Prepared including Twitter account) and/or RD and share it with partner agencies (consider links to other agencies such as the EA, Met Office etc).

The above information could form the basis of media releases and be copied to partner agencies for inclusion on their websites or public announcements. Full use should be made of the LRF Warning and Informing Plan, public websites and interviews to the media.

- 15. Considerations:
 - Officer(s) to attend TCG/SCG as appropriate and/or strategic recovery group (when established).
 - Support staff for ECC from other departments.
 - Shift working implications.
 - Staff welfare arrangements.
 - Officer(s) to rest/evacuation centre(s) if appropriate.
 - Arrangement to collate and distribute situation reports.



- Activation of all or parts of the SCC Activation / Warning and Informing / Human Aspects / Strategic Recovery Plan(s).
- Arranging mutual aid for additional resources in the worst affected areas.
- Requesting additional mutual aid via the DLUHC RED or other agreements.
- Informing the clergy.
- Using volunteer organisations for relevant tasks.
- 16. Consider implementing:
 - Strategic Recovery Plan.
 - Human Aspects Plan.
 - Warning and Informing Plan.



Appendix B - Contacts

Contact details have been removed as some have been provided in confidence and in some cases are ex-directory

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Appendix C - Flood and weather warning services

A flood warning service for areas at risk of flooding from main rivers is provided by the EA. Weather information and severe weather warnings are provided by the Met Office (PWS).

In addition the FFC is a partnership between the EA and Met Office set up to support their respective flood warning and weather warning services. By combining hydrology and meteorology expertise the organisations aim to identify where developing weather conditions, which added to previous rainfall and water table data, indicate flooding (especially surface water flooding) is likely. The outcome is a flood guidance statement that provides a long term assessment five days before the predicted event. This service is available to Category 1 and 2 responders providing them with longer lead times enabling preparations to be made.

Flood alert and flood warning messages

The EA provides a 24 hour flood warning service to the public, businesses, media and professional partners. Once registered for the Floodline Warnings Direct service, flood alerts/warnings are issued directly to people whose property is at risk of flooding from certain main rivers. People can opt to subscribe to the service, however in high risk areas, properties will be automatically registered using telephone numbers provided by telephony companies. All emergency services, local authorities and utility companies receive flood alerts / warnings directly.

A flood warning service is provided only for selected designated main rivers. There is no flood warning service for many smaller watercourses designated as main rivers and non-main rivers or ordinary watercourses where the EA do not believe sufficient lead time is possible i.e. significantly less than 2 hours. In Derbyshire no flood warning service is currently provided for surface water, sewer or groundwater flooding.

The EA's flood resilience teams use a computerised forecasting system to determine the likelihood of flooding from many main rivers. Information for this modelling comes from the rainfall radar and a network of rainfall and river level or flow gauges operated by the EA and partner agencies. Flood alerts/warnings are issued based on future (up to several hours) modelled river heights, taking into account current and predicted weather, especially rainfall.

A three day overview of UK wide flood risk is also available for public viewing on the EA's website.

The telephone, SMS and email messages issued by Floodline Warnings Direct have details of the areas at risk and sometimes include specific premises or roads. The EA's website has lists of flood alerts and flood warnings in force which contain a description of the location at risk and the current situation. There is also a live flood warning map on the EA website. Warnings are also available on social media platforms such as Facebook and Twitter, as well as mobile apps.



Flood warning codes

FLOOD ALERT		SEVERE FLOOD WARNING	Warning no longer in force
What it means Flooding is possible. Be prepared.	What it means Flooding is expected. Immediate action required.	What it means Severe flooding. Danger to life.	What it means No further flooding is currently expected for your area.
When it's used Two hours to two days in advance of flooding.	When it's used Half an hour to one day in advance of flooding.	When it's used When flooding poses a significant risk to life or significant disruption to communities.	When it's used When a flood warning or severe flood warning is no longer in force.
Triggers Forecasts that indicate that flooding from rivers may be possible. Forecast intense rainfall for rivers that respond very rapidly. Forecasts of high tides, surges or strong winds.	Triggers High tides, surges coupled with strong winds. Heavy rainfall forecast to cause flash flooding of rivers. Forecast flooding from rivers.	Triggers • Actual flooding where the conditions pose a significant risk to life and/or widespread disruption to communities. • On-site observations from flooded locations. • A breach in defences or failure of a tidal surge barrier or dam that is likely to cause significant risk to life. • Discussions with partners.	Triggers • Risk of flooding has passed. • River or sea levels have dropped back below severe flood warning or flood warning levels and no further flooding is expected. • Professional judgment and discussions with partners agree that a severe flood warning status is no longer needed.
Impact on the ground • Flooding of fields, recreation land and car parks. • Flooding of minor roads. • Flooding of farmland. • Spray or wave overtopping on the coast.	Impact on the ground • Flooding of homes and businesses. • Flooding of rail infrastructure. • Flooding to roads with major impacts. • Significant waves and spray on the coast. • Extensive flood plain inundation (including caravan parks or campsites). • Flooding of major tourist/recreational attractions.	Impact on the ground Deep and fast flowing water. Debris in the water causing danger. Potential or observed collapse of buildings and structures. Communities isolated by flood waters. Critical infrastructure for communities disabled. Large number of evacuees. Military support.	Impact on the ground No new impacts expected from flooding, however there may still be: Standing water following flooding; Flooded properties; Flooded or damaged infrastructure.
Advice to the public/media Be prepared to act on your flood plan. Prepare a flood kit of essential items. Avoid walking, cycling or driving through flood water. Farmers should consider moving livestock and equipment away from areas likely to flood. Call Floodine on 0845 988 1188 for up-to-date flooding information. Monitor local water levels on the Environment Agency website <u>www.environment-agency.gov.uk</u> .	Advice to the public/media Protect yourself, your family and help others. Move family, pets and valuables to a safe place. Turn off gas, electricity and water supplies if safe to do so. Put flood protection equipment in place. If you are caught in a flash flood, get to higher ground. Call Floodline on 0845 988 1188 for up-to-date information.	Advice to the public/media Stay in a safe place with a means of escape. Be ready should you need to evacuate from your home. Co-operate with the emergency services. Call 999 if you are in immediate danger. Call Floodline on 0845 988 1188 for up-to-date flooding information.	Advice to the public/media • Be careful. Flood water may still be around for several days and could be contaminated. • If you've been flooded, ring your insurance company as soon as possible.
Advice to operational organisations Check your flood response plans to see how your organisation needs to respond. Speak to your local Environment Agency Flood Warning Duty Officer for the latest forecast information. Dial into Flood Advisory Service teleconferences. Advise the public to call Flooding on 0845 988 1188 for up-to-date flooding information. Please report any flooding in your area to your local Environment Agency office.	Advice to operational organisations • Check flood response plans for actions required at this stage. • Speak to your local Environment Agency Flood Warning Duty Officer for the latest forecast information. • Advise the public to call Floodine on 0845 968 1188 for up-to-date flooding information. • Please report any flooding in your area to your local Environment Agency office.	Advice to operational organisations • Check flood response plans for actions required at this stage. • Advise the public to put their safety first and to be ready to evacuate should the authorities decide it's needed. • Develop clear messages for local communities and the public.	Advice to operational organisations • Recovery phase will have started. • Advise the public to call Floodline on 0845 988 1188 for advice on what to do if they have been affected by floodling.





Flood alert



FLOOD ALERT

Flooding is possible. Be prepared. When it is used: two hours to two days in advance of flooding.

The impact on the ground will be flooding to roads, gardens, fields, recreation grounds, etc. Detail included with each Flood Alert will indicate the likelihood of escalating to Flood Warning.

Recommended actions are:

- Monitor local news and weather forecasts.
- Be aware of water levels near you.
- Be prepared to act on your flood plan.
- Check on the safety of pets and livestock.
- Charge your mobile phone.
- Prepare a flood kit of essential items.

Flood alerts are issued for quite large areas and have the following implications:

- Watercourses in the general catchment area, including those outside the EA's responsibility, are likely to be full and may spill onto adjacent land.
- Watercourses with a warning service are likely to be full and may spill on to adjacent land including that used for agriculture and recreation but buildings are not expected to flood.
- Low lying roads near to watercourses may flood causing localised inconvenience.
- Specifically, buildings are not expected to flood.
- Areas protected by EA flood defences should be safe and are not expected to flood.
- NB: Flood alert messages will be updated on the EA website and on Floodline at least every 12 hours, or when the situation changes.



Flood warning



FLOOD WARNING

Flooding is expected. Immediate action required. When it is used: half an hour to one day in advance of flooding.

Impacts on the ground will be flooding to homes and businesses, infrastructure (roads / underground stations / utilities etc) which will have a major impact. Expect significant transport disruption and a high level of local media interest.

Recommended actions are those given for a flood alert in addition to those listed below:

- Move cars, pets, food, valuables and important documents to safety.
- Put flood protection equipment in place.
- Turn off gas, electricity and water supplies if safe to do so.
- Be prepared to evacuate your home.
- Protect yourself, your family and help others.
- Act on your flood plan.

Flood warnings are issued for smaller areas than flood alerts. They are for specific, named communities close to main rivers, and have the following implications:

- Named areas or communities (flood warning areas) are expected to flood.
- Land in between flood warning areas are also likely to flood.
- Buildings are now likely to flood in addition to land and roads.
- There may be localised disruption caused by flooded infrastructure and transport links.
- NB: A flood warning update can be issued for any flood warning area if the situation changes significantly. In addition to this, the flooding information on the EA website and Floodline will be updated at least every 8 hours, or when the situation changes.



Severe flood warning



Severe flooding. Danger to life.

Impacts on the ground include deep and fast flowing water, potential collapse of structures, critical resources disabled, large towns/communities isolated, large volumes of evacuees. Expect significant transport disruption and a high level of local and national media interest. These are only issued in exceptional circumstances and are likely to only be issued once a certain level of flooding has already occurred

When it is used: when flooding poses a significant threat to life. Indicates a worsening situation and decision to issue is made through discussion with tactical agencies. The EA reserves the right to issue in an emergency. A checklist of criteria exists to aid in making the decision on whether to issue a severe warning.

Recommended actions are those given for a flood warning in addition to those listed below:

- Stay in a safe place with a means of escape.
- Be prepared to lose utility supplies gas, electricity, water, telephone.
- Try to keep calm and reassure other, especially children.
- Co-operate with the emergency services and local authorities.
- Be ready to evacuate your home.
- Call 999 if you are in immediate danger.

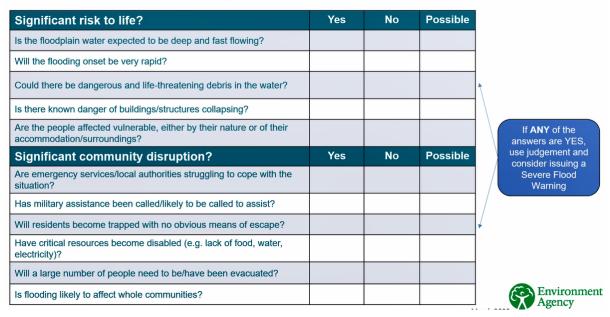
Severe flood warnings are issued for flood warning areas. They are specific named communities close to main rivers and have the following implications:

- Named areas or communities (severe flood warning areas) maybe expected to flood to a greater depth or wider extent.
- Buildings and roads are now likely to flood to a depth that could be life threatening.
- Considerable areas of land and many roads/railways are likely to flood.
- Large numbers of buildings are at risk (more than 100).
- Buildings and areas protected by flood defences (normally regarded as low risk by virtue of the defences) are now expected to flood.
- There may be considerable and widespread disruption caused by flooded property, infrastructure and transport links.
- Large number of residents and businesses are likely to be displaced/disrupted for many months.



NB: Severe flood warnings would not typically be issued before recipient's feet are wet. Therefore it is important that responders and the at risk public know to act on a flood warning and not to wait for a severe.

Severe Flood Warning checklist





Downgrade from severe flood warning to a normal flood warning

There is no logo or symbol for downgrade messages.

These downgrade messages are issued when the extreme risk to life has passed but some flooding (or the risk of further flooding) remains.

A normal flood warning message remains valid for the affected areas.

Where there is no normal flood warning, a flood alert remains valid for the wider area including the named flood warning area.

Downgrade from flood warning to flood alert

There is no logo or symbol for downgrade messages.

These downgrade messages are issued when water levels fall below the depth which warrants a flood warning to be in force for the named flood warning area. A flood alert message (flooding of low lying land but not property) remains valid for the wider area including the named flood warning area.

Warnings no longer in force

There is no logo or symbol for warnings no longer in force messages.

Previous flood alerts or flood warnings are no longer in force for the wider area.

Warnings no longer in force messages are issued when the flood warning or alert has been withdrawn for the wider area. The implications are:

- Water levels have now receded and flooding from watercourses is no longer an imminent threat.
- Be careful. There could still be areas with standing water that is slowly draining away.
- There will usually be considerable silt and debris left behind which needs clearing.
- Repair and remediation work can be assessed and started.
- There remains a danger from damaged electricity cables/plant and gas supplies (gas filling buildings where pilot lights have been extinguished by the flood).
- There could be hazards from damaged roads, footpaths, bridges and displaced drain/inspection covers.
- If you have been flooded, telephone your insurance company as soon as possible.



Dissemination of flood alerts and flood warnings

Flood alerts and warnings are disseminated via:

Floodline Warnings Direct. This system is able to automatically dial designated numbers and give a spoken, SMS (text), email or pager message with details of the type of warning, the location, the situation and advice on what to do next.

Floodline. A 24 hours dial-up recorded information service giving the latest assessment of the flooding situation and information about flood warnings in force for the required stretch of a particular river.

Telephone: 0345 988 1188. Quick dial codes are available from the EA website to speed access to information on local rivers.

The <u>EA's Gov.uk pages</u>, has links to flooding information from the front page.

Media broadcasts in particular local radio and television which give details of flood warnings usually alongside weather forecasts, news bulletins and travel information. Local radio stations receive all flood alerts/warnings for the area they serve.

Use of other multimedia methods, such as RSS feeds and the use of widgets in Facebook and Twitter showing the EA flood warnings imbedded on other websites and users able to like via Facebook.

Additional methods used as the need arises include:

- Loudspeaker messages from officials on foot, in vehicles or in helicopters.
- Door to door visits to give verbal warnings to occupiers (depending on available staff resources).

Flood warning apps are available for smartphones.

Contingency arrangements to issue flood alerts and flood warnings

Media messages

The EA will endeavour to keep media outlets, particularly local radio informed of the latest situation with regard to flood alerts and warnings (with emphasis on BBC local stations due to their established role of community and public service).

It may not be possible to tailor the messages specifically to the individual station's coverage.

In the event of a total Floodline Warnings Direct failure, the EA area flood resilience team would email partners to make them aware of the situation and update them on

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the flooding status. Flood warning information should still be able to be displayed on the EA website and on Floodline.

Flood wardens

Despite the high risk of flooding in many communities and repeated efforts to recruit, only a small number of individuals have volunteered to act as flood wardens. Where they exist, the EA will endeavour to contact them to gain a local update on the prevailing situation and to advise the warden to spread word locally of any flood warnings in force.

Flood warning area	River	Local authority area
Alderwasley	River Derwent	AV
Ashbourne	Henmore Brook	DD
Ashford in the Water	River Wye	DD
Bakewell	River Wye	DD
Barrow upon Trent	River Trent	SD
Belper	River Derwent	AV
Bonsall	River Derwent	DD
Bradwell	Bradwell Brook	HP & DD
Castleton	Peakshole Water	HP
Coton in the Elms	Pessall Brook	SD
Darley Dale	River Derwent	DD
Darley Dale/South Darley	Warney Brook	DD
Duffield	River Derwent	AV
Egginton	Egginton/Hilton Brook	SD
Elvaston	River Derwent	SD
Grindleford	River Derwent	DD
Hathersage	River Derwent	DD
Hilton	Hilton Brook	SD
Horsley (Lower Kilburn)	Bottle Brook + Park Brook	AV
Longford	Longford Brook	DD
Lower Kilburn	Bottle Brook	AV
Matlock	River Derwent/Bentley Br	DD
Ockbrook and Borrowash	Ockbrook	ED
Outseats Parish	River Derwent	AV
Repton	River Trent	SD
Rosliston	Pessall Brook	SD
Scropton	River Dove	SD
Stoney Middleton	Dale Brook	DD
Whaley Bridge	River Goyt	HP

A list of flood warning areas served by flood wardens is below:

The EA and Derbyshire County Council are working together to promote flood wardens and community flood plans not only for fluvial flooding but within those communities susceptible to surface water flooding as well. A full list is held by the emergency planning team.



Flood Warning Area	Watercourse	Local authority area
Breadsall	Dam Brook Boosemoor Brook	ER
Ockbrook	Ock Brook	ER



The flood warning service in Derbyshire

Flood alerts and flood warnings or severe flood warnings

Flood alerts are issued for the areas covering Derbyshire as listed on the following pages.

Flood warnings or severe flood warnings are issued for specific locations or communities within a flood alert area.

The EA's flood warning system is able to give individual warnings to communities in danger of flooding. Therefore, it is possible that some areas will be under a severe flood warning while other areas are only at flood alert or flood warning level. Each warning received will state which area it relates to. For this reason, it is extremely important to read flood warnings carefully.

There is no flood warning service for the following river catchments in Derbyshire:

- River Meaden.
- River Poulter.
- River Royton Oldcoats.
- Porter Brook and River Sheaf.
- Markeaton Brook.

Flood alert area	EA area	Flood warning area (within alert area)	LA area
River Amber	Derbys, Notts and	River Amber at Ambergate	AV
Bottle Brook in	Leics	Bottle Brook at Rawsons Green	AV
Derbyshire	(DNL)	Bottle Brook at Lower Kilburn and Coxbench	AV
(Bottle Brook and		Bottle Brook at Little Eaton	AV &
tributaries from			ER
Denby to River			
Derwent at			
Little Eaton)			
Upper Derwent in		River Derwent at Bamford including Mytham	DD &
Derbyshire		Bridge	HP
(including		River Derwent at Hathersage	DD
tributaries from		River Derwent at Grindleford	DD
Ladybower		River Derwent at Calver	DD
Reservoir to the		River Derwent at Baslow and Bubnell	DD
River Wye at		River Derwent at Chatsworth	DD
Rowsley)		River Derwent Tribs at Bradwell Brook	DD
		Rivers Wye and Derwent at Rowsley	DD



Flood alert area	EA area	Flood warning area (within alert area)	LA area
Lower Derwent in Derbyshire	Derbys, Notts and	River Derwent at Churchtown and Northwood	DD
(including	Leics	River Derwent at Darley Dale	DD
tributaries from	(DNL)	River Derwent at Darley Bridge	DD
Rowsley to River		River Derwent at Matlock	DD
Trent at Shardlow)		River Derwent at Matlock Bath	DD
		River Derwent at Whatstandwell inc	DD &
		Cromford and Lea Wood	AV
		River Derwent at Ambergate	AV
		River Derwent at Belper	AV
		River Derwent at Milford	AV
		Rivers Ecclesbourne and Derwent at Duffield	AV
		River Derwent at Duffield Church and Village Hall	AV & ER
		River Derwent at Little Eaton	ER
		River Derwent at Allestree Ford Lane Bridge	ER &
		and Darley Abbey Park	DY
		River Derwent at Darley Abbey, Folly Road	DY
		River Derwent at Little Chester, Eastgate and Cattle Market	DY
		River Derwent at Racecourse Park at Chaddesden	DY
		River Derwent at Derby City	DY
		River Derwent at Chaddesden	DY
		River Derwent at Pride Park and Derby Railway Station	DY
		River Derwent at Derby City Water Treatment Works	DY
		River Derwent at Raynesway	DY
		River Derwent at Alvaston	DY
		River Derwent at Elvaston Castle Country Park	DY, ER & SD
		River Derwent at Church Wilne and Wilne Lane	ER
		River Derwent at Ambaston Lane	ER & SD
		River Derwent at Ambaston	SD
		River Derwent at Draycott	ER
		Rivers Trent and Derwent at Shardlow and Great Wilne	SD



Flood alert area	EA area	Flood warning area (within alert area)	LA area
Upper Dove	Staffs,	Henmore Brook at Ashbourne	DD
(From Izaak Walton to	Warwicks & West	River Dove at Hanging Bridge and Church Mayfield	DD
Rocester including	Mids	River Dove at Norbury & Lower Ellastone	DD
Ashbourne)	(SWWM)	River Dove from Coldwall Bridge to Okeover	DD
Lower Dove		River Dove at Doveridge and Sudbury	DD
(From Rocester to		River Dove at Scropton	SD
Clay Mills)		River Dove at Hatton	SD
		River Dove at Marston on Dove	SD
		River Dove and Egginton Brook at Egginton (See below)	SD
Lower Dove Brooks and		Foston Brook at Foston	SD
Eggington Brook in Derbyshire		Hilton Brook at Sutton on the Hill and Uttoxeter Road, Hilton	SD
		Hilton Brook at Hilton	SD
		River Dove and Egginton Brook at Egginton (Flood Warning Area is split across 2 Flood Alert areas)	SD
		Etwall Brook at Etwall	SD
River Ecclesbourne	Derbys, Notts and	Rivers Ecclesbourne and Derwent at Duffield	AV
River Erewash in Derbyshire and	Leics (DNL)	River Erewash at Pinxton	BO & AV
Nottinghamshire		River Erewash at Pye Bridge	AV
(River Erewash		River Erewash at Ironville	AV
and its tributaries		River Erewash at Jacksdale *	AV
from Kirkby in Ashfield		River Erewash at Langley Mill	AV & ER
to the River Trent		River Erewash at Ilkeston	ER
at Attenborough)		River Erewash at Stapleford Moorbridge Lane area	ER
		River Erewash at Stapleford Oakfield Road area	ER
		River Erewash at Sandiacre	ER
		River Erewash at Long Eaton	ER
		Rivers Trent and Erewash at Sawley and Long Eaton	ER
		Rivers Erewash and Trent at Toton *	ER



Flood alert area	EA area	Flood warning area (within alert area)	LA area
River Erewash Tributaries in Derbyshire Tributaries of the	Derbys, Notts and Leics (DNL)	Beauvale Brook at Eastwood	BD
River Erewash (including Golden Brook, Beauvale		Golden Brook and Stream at Breaston	ED
Brook, Bailey Brook, Boundary Brook and Golden Stream)		Bailey Brook at Langley	BD
Tributaries in North Derbyshire Tributaries to the Rivers Noe, Derwent and Wye in North Derbyshire including Grinds Brook, Peakshole Water, Bradwell Brook, Stoke Brook, Bar Brook, Tideswell Brook, Warney Brook, Bentley Brook, Via Gellia and Lea Brook	Derbys, Notts and Leics (DNL)	No Flood Warnings in this area currently	AV DD
Tributaries in South Derbyshire Tributaries to the River Derwent and River Trent in South Derbyshire, including Black Brook, Coppice Brook, Markeaton Brook, Chaddeston Brook, Wilne Drain, Cuttle Brook, Doles Brook, Ramsley Brook and Carr Brook	Derbys, Notts and Leics (DNL)	No Flood Warnings in this area currently	SD DY



Flood alert area	EA area	Flood warning area (within alert area)	LA area
River Amber	Derbys, Notts and	River Amber at Ambergate	AV
Bottle Brook in	Leics	Bottle Brook at Rawsons Green	AV
Derbyshire	(DNL)	Bottle Brook at Lower Kilburn and Coxbench	AV
(Bottle Brook and		Bottle Brook at Little Eaton	AV &
tributaries from			ER
Denby to River			
Derwent at			
Little Eaton)			
Upper Derwent in		River Derwent at Bamford including Mytham	DD &
Derbyshire		Bridge	HP
(including		River Derwent at Hathersage	DD
tributaries from		River Derwent at Grindleford	DD
Ladybower		River Derwent at Calver	DD
Reservoir to the		River Derwent at Baslow and Bubnell	DD
River Wye at		River Derwent at Chatsworth	DD
Rowsley)		River Derwent Tribs at Bradwell Brook	DD
		Rivers Wye and Derwent at Rowsley	DD



Flood alert area	EA area	Flood warning area (within alert area)	LA area
Lower Derwent in Derbyshire	Derbys, Notts and	River Derwent at Churchtown and Northwood	DD
(including	Leics	River Derwent at Darley Dale	DD
tributaries from	(DNL)	River Derwent at Darley Bridge	DD
Rowsley to River		River Derwent at Matlock	DD
Trent at Shardlow)		River Derwent at Matlock Bath	DD
,		River Derwent at Whatstandwell inc	DD &
		Cromford and Lea Wood	AV
		River Derwent at Ambergate	AV
		River Derwent at Belper	AV
		River Derwent at Milford	AV
		Rivers Ecclesbourne and Derwent at Duffield	AV
		River Derwent at Duffield Church and Village Hall	AV & ER
		River Derwent at Little Eaton	ER
		River Derwent at Allestree Ford Lane Bridge	ER &
		and Darley Abbey Park	DY
		River Derwent at Darley Abbey, Folly Road	DY
		River Derwent at Little Chester, Eastgate and Cattle Market	DY
		River Derwent at Racecourse Park at Chaddesden	DY
		River Derwent at Derby City	DY
		River Derwent at Chaddesden	DY
		River Derwent at Pride Park and Derby Railway Station	DY
		River Derwent at Derby City Water Treatment Works	DY
		River Derwent at Raynesway	DY
		River Derwent at Alvaston	DY
		River Derwent at Elvaston Castle Country Park	DY, ER & SD
		River Derwent at Church Wilne and Wilne Lane	ER
		River Derwent at Ambaston Lane	ER & SD
		River Derwent at Ambaston	SD
		River Derwent at Draycott	ER
		Rivers Trent and Derwent at Shardlow and Great Wilne	SD



Flood alert area	EA area	Flood warning area (within alert area)	LA area
Upper Dove (From Izaak Walton to	om IzaakWarwicksalton to& Westcester includingMids	Henmore Brook at Ashbourne	DD
		River Dove at Hanging Bridge and Church Mayfield	DD
Rocester including		River Dove at Norbury & Lower Ellastone	DD
Ashbourne)		River Dove from Coldwall Bridge to Okeover	DD
Lower Dove		River Dove at Doveridge and Sudbury	DD
(From Rocester to Clay Mills)		River Dove at Scropton	SD
		River Dove at Hatton	SD
		River Dove at Marston on Dove	SD
		River Dove and Egginton Brook at Egginton (See below)	SD
Lower Dove Brooks and		Foston Brook at Foston	SD
Eggington Brook in Derbyshire		Hilton Brook at Sutton on the Hill and Uttoxeter Road, Hilton	SD
		Hilton Brook at Hilton	SD
		River Dove and Egginton Brook at Egginton (Flood Warning Area is split across 2 Flood Alert areas)	SD
		Etwall Brook at Etwall	SD
River Ecclesbourne	Derbys, Notts and Leics (DNL)	Rivers Ecclesbourne and Derwent at Duffield	AV
River Erewash in Derbyshire and		River Erewash at Pinxton	BO & AV
Nottinghamshire		River Erewash at Pye Bridge	AV
(River Erewash		River Erewash at Ironville	AV
from		River Erewash at Jacksdale *	AV
Kirkby in Ashfield to the River Trent at Attenborough)		River Erewash at Langley Mill	AV & ER
		River Erewash at Ilkeston	ER
		River Erewash at Stapleford Moorbridge Lane area	ER
		River Erewash at Stapleford Oakfield Road area	ER
		River Erewash at Sandiacre	ER
		River Erewash at Long Eaton	ER
		Rivers Trent and Erewash at Sawley and Long Eaton	ER
		Rivers Erewash and Trent at Toton *	ER



Flood alert area	EA area	Flood warning area (within alert area)	LA area
River Erewash Tributaries in Derbyshire Tributaries of the River Erewash (including Golden Brook, Beauvale Brook, Bailey Brook, Boundary Brook and Golden Stream)	Derbys, Notts and Leics (DNL)	Beauvale Brook at Eastwood	BD
		Golden Brook and Stream at Breaston	ED
		Bailey Brook at Langley	BD
Tributaries in North Derbyshire Tributaries to the Rivers Noe, Derwent and Wye in North Derbyshire including Grinds Brook, Peakshole Water, Bradwell Brook, Stoke Brook, Bar Brook, Tideswell Brook, Warney Brook, Bentley Brook, Via Gellia and Lea Brook	Derbys, Notts and Leics (DNL)	No Flood Warnings in this area currently	AV DD
Tributaries in South Derbyshire Tributaries to the River Derwent and River Trent in South Derbyshire, including Black Brook, Coppice Brook, Coppice Brook, Markeaton Brook, Chaddeston Brook, Wilne Drain, Cuttle Brook, Doles Brook, Ramsley Brook and Carr Brook	Derbys, Notts and Leics (DNL)	No Flood Warnings in this area currently	SD DY



Flood alert area	EA area	Flood warning area (within alert area)	LA area
River Mease (From Ashby to Croxall)	Staffs, Warw & W Mids (SWWM)	River Mease at Measham and Netherseal	SD
River Mease (From Ashby to Croxall)	Staffs, Warw & W Mids (SWWM)	River Mease at Clifton Campville Harlaston and Croxall	

* Flood warning areas part in Derbyshire but properties at risk in Nottinghamshire

Flood alert area	EA area	Flood warning area (within alert area)	LA area
River Mersey Uplands	Gr Man, Mersey &	River Etherow at Woolley Bridge and Hadfield	HP
(Including Hyde,	Cheshire (GMMC)	River Etherow at Charlesworth & Melandra	HP
Ashton-under- Lyne, Denton, Stalybridge and		River Etherow at Broadbottom (properties at risk in Tameside)	HP
Glossop)		Glossop & Long Clough Brook at Glossop	HP
		River Goyt at Whaley Bridge	HP
River Doe Lea	Yorkshire	River Doe Lea at Staveley	BO &
(from Hardwick Hall to Staveley)		Pool Brook at Duckmanton	СН
River Rother		River Drone at Unstone and Dronfield	CH &
Upper (Including River		including trading estate at risk from Barlow Brook	NE
Rother and its		River Hipper at Brampton	CH
tributaries from		River Hipper at Central Chesterfield	CH
Chesterfield to		Holme Brook at Ashgate	CH
Staveley)		River Rother at Birdholme	CH
		River Rother at Central Chesterfield	СН
		River Rother at North Chesterfield and Brimington	СН
		River Rother at Tapton	CH
		River Rother at Staveley Business Centre	CH
		River Whitting at Old Whittington	СН
River Rother		River Rother at Renishaw	NE
Lower		River Rother at Killamarsh	NE
(Including River Rother and its tributaries from Renishaw to Rotherham)		The Moss and River Rother at Eckington	

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Burton Trent	Staffs,	River Trent at Burton upon Trent	SD
(From Kings	Warw &	River Trent at Catton, Barton under	SD
Bromley to	W Mids	Needwood and Branston Water Park	
Clay Mills)		River Trent at Riverside areas of Burton	SD
		upon Trent	
River Trent in	Derbys,	River Trent at Willington 1	SD
Derbyshire	Notts and	River Trent at Willington, Repton Road	SD
(River Trent and	Leics	area	
tributaries in	(DNL)	River Trent at Twyford	SD
Derbyshire from		River Trent at Barrow upon Trent 1	SD
Newton Solney to		River Trent at Swarkestone	SD
Castle			
Donington)			

1. There is an operational warning for Barrow upon Trent issued when the Willington gauge is forecast to reach 3 metres, when access to some properties along Church Lane will be cut off. A flood warning is issues at 3.3 metres.

Flood alert area	EA area	Flood warning area (within alert area)	LA area
River Trent in Derbyshire		Rivers Trent and Derwent at Shardlow and Great Wilne	SD
(River Trent and		River Trent at New Sawley	ER
tributaries in Derbyshire from Newton Solney to Castle Donington)		Rivers Trent and Erewash at Sawley and Long Eaton	ER
River Trent in Nottinghamshire (River Trent in		River Trent at Trentlock *	ER
Nottinghamshire from Castle Donington to Cromwell Weir)		Rivers Erewash and Trent at Toton *	ER
River Wye in Derbyshire		Hogshaw Brook at Lightwood Road area of Buxton	HP
(Including the River Wye and its		River Wye at Chee Dale, Cressbrook and Upperdale	DD & HP
tributaries from		River Wye at Litton Mill	DD
Burbage to River		River Wye at Ashford in the Water	DD
Derwent at Rowsley)		River Wye at Ashford in the Water, Church Street Area	DD
		River Wye at Bakewell	DD
		River Wye at Wye Bank and Milford at Bakewell	DD
		Rivers Wye and Derwent at Rowsley	DD

* Flood warning areas part in Derbyshire but properties at risk in Nottinghamshire



Flood warning expansion project

Flood alert area	EA area	Flood warning area (within alert area)	LA
			area
Lower Derwent	EMD	Markeaton and Bramble Brooks at Derby	AV &
		City	DY
Lower Derwent	EMD	Coppice Brook at Belper	AV
Upper Derwent	EMD	Peakshole Water at Castleton	HP
Lower Derwent	EMD	Via Gelia watercourse at Cromford	DD

New flood warning areas due to go live in the next 12 months

Operational flood warnings

Operational area	Water levels to instigate alert	Mitigating actions following alert
Chemring defence / Rolls Royce	2m from Matlock	
	2.19m from Derby St. Mary's	
	1.75m from Church Wilne (Outbuildings flood)	
	The above 3 are separate operationals as the message content relates to the specific levels at the gauges.	

Operational area	Water levels to instigate alert	Mitigating actions following alert
Church Lane at Barrow Upon Trent	Issued when 3m is forecast from Willington, when 3m is exceeded properties along Church Lane lose access.	

Operational area	Water levels to instigate alert	Mitigating actions following alert
Ladybower Drawdown	Operational alert received when Ladybower reservoir drawdown is	
	instigated	

Operational area	Water levels to instigate alert	Mitigating actions following alert
Cathedral Green Bridge (Derby)	2m from Derby St.Marys	Alert informing Derby City Council to open
		the swing bridge

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Operational area	Water levels to instigate alert	Mitigating actions following alert
Derbyshire Dales	1.25m from Ashford	Alerting Derbyshire Dales to install stop logs at Bakewell at the upstream locations (including the crescent) and closing the upstream footbridge



River levels on the internet

The EA's website has pages showing and associated recent data. **This information does not replace flood warnings** but can provide basic data for those familiar with the behaviour of the river in their locality. The gauging stations are polled (contacted and data downloaded) once or twice each day under normal conditions. When flooding is a possibility, the gauges are polled more frequently, perhaps several times a day.

The following third party website <u>http://www.gaugemap.co.uk/</u> shows the live gauge readings of river levels over the last five days.

The website shows the most recent data including highest recorded and recent highest, but **does not show forecasted levels for every gauge**. Currently forecast information is only available on this website for the Church Wilne river gauge. Forecast information may be available for other gauges. During flooding, advice on anticipated river levels can be obtained from the flood warning duty officer of the relevant EA area.

Predicted river levels are included in some flood warning messages and are updated on the Floodline recorded message service and on the warnings in force section of the EA website.

Flood guidance statements (FGS)

The FFC produce flood guidance statements which give a national overview with up to five days advance notice of potential flooding. This includes flooding from the sea, rivers, surface water (heavy rain) and groundwater. The five day flood guidance statement can be viewed on the Met Office Hazard Manager website and it is also emailed out to Category 1 and 2 responders and this is normally received before 11:00am daily.

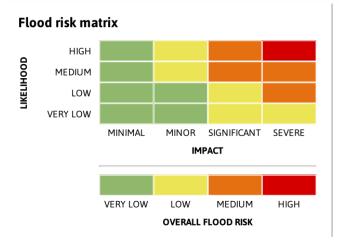
To assess the level of risk, the FFC takes into account a large number of weather and catchment factors. Assessments are made in different ways for coastal, river, surface water and groundwater and cover the following criteria:

Criteria	Comments
Likelihood of an adverse weather event	Where likelihood bands are described as:
	Very Low
Recent weather conditions	Is the event shortly after an earlier period of prolonged rain or other high impact weather?
Area and duration	Is it expected to be short and localised or will it affect a large geographical area over several hours?
Condition of the catchments	How saturated are the catchments? How high are the rivers and what are the underlying conditions?
Flood forecast models	Detailed models for the coast, showing surges and large waves, and flood flows for rivers are evaluated.



Seasonal factors	For example snow cover or leaf fall.
Combined effect of river flow and high tides	If a river flood is being assessed, does this coincide with high tides, which could cause problems?

The above criteria is assessed using the Flood Risk Matrix (see below) and examining the likelihood of flooding against potential impacts (see below) which produces a flood risk level and the map of England and Wales is coloured accordingly.



Summary of potential impacts

MINIMAL

Isolated and minor flooding of low-lying land and roads Isolated spray/wave on coastal promenades Little or no disruption to travel, but wet road surfaces

MINOR

Localised flooding of land and roads Flooding affecting individual properties Disruption to travel and key sites in flood plans

SIGNIFICANT

Flooding affecting parts of communities Possible danger to life and damage to buildings/structures Disruption to travel and key sites in flood plans

SEVERE

Danger to life, severe disruption to travel Widespread flooding affecting whole communities Widespread disruption or loss of infrastructure Large scale evacuation of properties possible

Flood advisory service (FAS) teleconference

The FAS is an integrated service provided by the EA and the MET Office. The trigger for the FAS is based on forecasts in the FGS which suggest a risk of flooding (amber & red = teleconference, yellow = email).

The service is delivered through teleconferencing to ensure all parties, including county, emergency services and district/borough/city councils have an early understanding of and engagement with flood risk. Derbyshire County Council will act on behalf of all area including Derby city and circulate minutes, unless particular risk from the River Derwent in Derby city then the county will invite Derby city colleagues to the teleconference. A set agenda template is shown below.

The FAS helps to ensure improved communication with partners, by providing earlier information and sharing of our assessment on potential flooding. Allow partners to prepare response (rostering up, putting people on standby, clearing watercourses) in advance.



Agenda

ltem	Subject	Time	Lead
1	Introduction, welcome and confirm attendees		EA
	State reason for holding the teleconference		
2	Weather situation	5 mins	Met Office
	Update of weather warnings in force and any weather warnings likely to be issued. Weather issues to consider / be aware of - eg will heavy rain be accompanied by strong winds which could affect rescue operations. Confidence level and uncertainty in the weather forecast.		
3	Flooding situation	5 mins	EA
	Update of flood alerts or warnings in force / likely to be issued. Any particular areas of concern, affected areas and the local impact on the ground. Confidence level and uncertainty in the flood forecast.		
4	Questions from partners	5 mins	Partners
	An opportunity for partners to ask questions on the weather and flooding situation as discussed in items 2 and 3.		
5	Updates from partners	5 mins	Partners
	Partners to provide information on any issues which may be relevant to other parties or the wider incident response. The chair will prompt a response from each organisation attending.		
6	Next steps in the Multi-Agency Response	5 mins	EA
	Discuss the requirement to convene tactical or strategic command?		
	Date and time of next teleconference (if required).		
7	Close		EA



Weather warning services

Flooding is closely associated with weather events and the Met Office provides a range of information via the public weather service. This includes specialised services for Category 1 and 2 responders to enable them to prepare for and respond to severe weather events.

Much of the data required by emergency responders is now available online via the Met Office Hazard Manager service.

The national severe weather warning service

The Met Office provides the national severe weather warning service (NSWWS) to alert the public, civil emergency authorities and MoD in advance of severe weather conditions so that they can take action to reduce the impacts, both during and after the event.

The warnings are issued directly to emergency responders by fax and email and to the public via the media or email. They are also posted on the <u>Met Office website</u> at which contains further details on the weather forecast.

Full details of weather warning services are contained in the Severe Weather Plan produced by the Derbyshire County Council Emergency Planning Team.



Appendix D - Specialist resources

This section identifies the resources of professional partners.

Sandbags

Sandbag policy

All local authorities should have a sandbag policy which encourages individual / community resilience and preparedness prior to flooding occurring, particularly for known flood risk locations. This should, over time, reduce demand for sandbag distribution when flooding is actually occurring allowing effort to be directed towards reactive maintenance of flood critical assets.

Any requests for sandbags during a flooding event should be carefully prioritised. Derbyshire County Council's policy, in line with these principles, is outlined below:

- Derbyshire County Council will, together with the Environment Agency (EA) and with assistance from other local authorities, aim to promote and contribute to personal resilience and self-help resources, where most practicable, in advance of flooding occurring.
- Derbyshire County Council will provide householders known to be at risk of flooding, from any source, a self-help starter pack containing a minimum of 10 empty sandbags and information. These are either sent out in the post from county hall or they are also available for collection by members of the public from some local authority receptions.
- Derbyshire County Council will provide synthetic water absorbent sacks in addition to or as an alternative for higher risk property or to more vulnerable residents who would not be able to deploy traditional sandbags. This type of contribution would be seen as a one-off and recorded.
- Derbyshire County Council, with assistance from local authorities (and in some cases the EA), will continue to promote community/parish response plans and the provision as a one-off contribution, of a maximum of 500 empty sandbags to help develop a local sandbag store to promote a local response.
- All calls made to the council to report flooding will be assessed to ascertain the potential/likely cause, the involvement or otherwise of a drainage asset and the most effective response with the resources available at the time. No commitment can be given on timescales for sandbag delivery.
- Every attempt will be made to prioritise those properties in immediate danger from flooding as far as reasonably practicable to ensure the most vulnerable are given the highest priority
- All local authorities will endeavour to provide filled and/or synthetic sandbags to properties reporting imminent flood risk.



- Derbyshire County Council will liaise with partners, particularly district/borough councils to ensure their resources are deployed effectively and to avoid duplication.
- Derbyshire County Council will endeavour to make post flooding follow-up calls to those who requested sandbags to offer the self-help starter packs and advice for future self -protection measures.
- A back up stockpile of synthetic flood sacks will be retained by Derbyshire County Council at County Hall, enabling emergency planning and flood risk management staff to deploy/deliver to residents, where this is practicable.
- Sandbags will not be collected after a flood. Disposal is the responsibility of individual householders.
- NB: See appendix B for local authority contact details. These include numbers for both the public and professional partners.

Details of sandbag storage locations and numbers are held by local authorities and Derbyshire County Council Emergency Planning Team

The emergency planning team holds a resources list of suppliers of the following:

• Sandbags and sand; sandbag filling machinery; alternative sandbag products & flood defence products and devices.

Information on the use and storage of sandbags is available on the <u>Derbyshire</u> <u>County Council</u> and <u>Environment Agency</u> websites.

The Environment Agency

The Environment Agency holds a national stock of sandbags and sandbagging machines. They also have the following specialist resources should they be required:-

- 40 Kilometres of temporary barrier.
- Mobile incident communications unit.
- Lighting towers.
- Drone capability (in house and external).



Boats

Emergency services, other Cat 1 responders and voluntary agencies. Access to:

Rowing boats (fibreglass) / Work boats / Dinghies / Motorised boats / Buoyancy aids.

See appendix B contacts for arranging access to these resources.

Further details and locations have been redacted for security purposes.

Specialised vehicles

When access through flooded streets is required, standard commercial vehicles with high ground clearance, all-wheel drive if available, could be used in water up to approximately axle height ($1/_2$ metre).

Land Rovers and similar 4x4 vehicles can be used in quite deep water provided the engine air intake is fitted with an extension tube or snorkel to prevent water ingress. Standard Land Rovers can traverse limited depths of water as can agricultural tractors and trailers with high ground clearance.

Vehicles deployed into flood water should avoid creating damaging bow waves.

Further details and locations have been redacted for security purposes.

Pumps

Emergency services and local authorities have access to pumps varying in size and capacity.

Further details and locations have been redacted for security purposes.

See appendix B for access to these resources.

Many DIY/hardware stores, plant/tool hire shops, and some of the flood defence product suppliers sell pumps as part of their service.

- NB: The electric shock hazard of mains voltage pumps should be considered when deploying electrically powered pumps (mains or generator supply).
- NB: Diesel, liquefied petroleum gas (LPG) and petrol powered pumps (or generators for electric pumps) give off carbon monoxide fumes in use. The engine should be provided with adequate ventilation (users of such pumps were poisoned by fumes when operated inside buildings during the 2007 floods).

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Other resources

Upon request the emergency planning team will endeavour to source any additional resources to assist with the flooding response and recovery.

National Flood Rescue Asset Register

The National Resilience Fire Control (NRFC), based in Merseyside provides a single point of contact for the Flood Rescue National Asset Register. This provides a comprehensive list of all accredited flood rescue teams that have declared their compliance with the team typing requirements set out in the Defra Concept of Operations, and who maintain availability for deployment on an on-going basis.

Whilst the bulk of these teams are provided by the FRS, a significant minority are drawn from the voluntary sector, including the RNLI, Mountain Rescue England and Wales, and a range of local groups eg Humber Rescue. All have committed to deliver the standard teams as set out in the ConOp and should be treated as interchangeable for all planning and deployment purposes. The Asset Register represents the only resources which can be firmly relied upon for pre-planning.

Process for reporting a major/wide area event and requesting mutual aid

- The emergency response authority affected by the flood identifies risk of a flood event requiring additional specialist flood rescue assets.
- The Impacted Authority requests assistance via the National Resilience Fire Control (NRFC) in Merseyside. For validation purposes, the call to the NRFC must be made by a Fire and Rescue Service Control Room.
- The NRFC verifies the identity of the caller as a representative of an Impacted Authority and records the details of the mutual aid request (as outlined below).
- The NRFC will decide the most appropriate course of action, including assembling typed teams from the National Asset Register to meet the request for assistance, having liaised as appropriate with the:
 - i. Impacted Authority.
 - ii. Lead Government Department (which is Defra).
 - iii. CCC (Regional Civil Contingencies Committee) (if activated).
 - iv. Chief Fire and Rescue Adviser Duty Officer and/or DCLG Emergency Room (if established), National Resilience Assurance Team (NRAT) Advisor and Tactical Advisors (TacAd's).
- All flood rescue assets on the Register will be requested by NRFC who will contact flood rescue responder organisations via their agreed contact for mobilisation requests (for FRS flood rescue assets this is likely to be individual Fire and Rescue Services; for non-FRS flood rescue responders this is likely to be the organisation's control room).
- The NRFC will maintain a national overview of all flood rescue assets on the National Asset Register and will provide a 365/24/7 function and through



allocated TacAd's supporting NRAT Advisors will provide any strategic advice that might be necessary.

- NRFC and TacAd's supporting NRAT Advisors will maintain a forward looking strategic overview of likely rescue requirements in consultation with the Flood Forecasting Centre and any other strategic co-ordination functions that have been established, eg Lead Government Department (Defra).
- When formally stood down, the NRFC will communicate with all deployed teams on the National Asset Register.

During widespread flood related emergencies, the Fire & Rescue Service will under normal circumstances be the lead agency in the co-ordination, "overall command" and deployment of local Flood Rescue Boat Assets. The ability of an organisation to respond will be subject to the particular agencies personnel and asset availability. The capability to respond to the designated RV point and potential subsequent operational deployment will be dependent on any on-going or immediately foreseeable incidents the organisation may already be committed to.

It is stressed that although the FRS will have overall command of the incident, sector etc. each organisation will retain command of their own assets.

This protocol will only be instigated when additional Flood Rescue Boat assets may be foreseeably required to assist with inland flood rescue activities such as predetermined evacuation, search operations, lead outs and potentially flood rescues.

In order to assess the capability of an organisation to be deployed during flood related emergencies, each organisation agree to operate and declare their assets and number of trained personnel they would expect to be available <u>in advance</u> and in accordance with the current Defra ConOP.

Flood Rescue Concept of Operations.

Assets will be credentialed whenever possible by a FRS Level 6 National Flood Rescue Tactical Advisor and any subsequent deployments will be in accordance with the team's capability (both personnel and assets). In order to achieve this more effectively rescue boat assets will be credentialed beforehand based on information compiled. Organisations should include a proposed overview of the assets and number of trained personnel they would reasonably foresee is available to respond. These details will be held on a secure fire service database.

During the response phase to an emergency, organisations will declare their availability prior to responding to the pre-determined RV point. This will be dependent on the type and location of the incident but this will normally be a designated Strategic Holding Area.



To assist and speed up this process during the response phase of any incident FRS Service Control will be contacted (number required) and assets verbally declared. This must be supported by email details including the actual names and details of the responding crew. (e-mail address required). As per agreed national protocols whenever possible a level 6 Flood TacAd will confirm the asset capability prior to deployment and brief teams accordingly in relation to command and communication protocols/networks to be utilised.

Once deployed teams will operate and report directly to the Fire & Rescue Service on-scene incident commander (where applicable) and operate to the agreed safe system of work. This will include an agreed communications protocol where plain English communications will be utilised.



Appendix E - Working near water, health and safety advice and information

Water, especially flood water, can be hazardous as a working environment. Even after the flood has drained away, there are often residual hazards which must be considered.

Health and safety risk assessments should be carried out for all appropriate staff activities in relation to working in or near water or where contamination has been left behind.

Many organisations have developed their own policies and procedures for this area of work which must be followed where available.

Relevant guidance available on the HSE website includes:

Personal buoyancy equipment on inland and inshore waters

The content of organisations' risk assessments, policies and procedures is subject to constant review and has not been included in this plan as it may quickly become out of date. Staff should consult the latest information available within their organisation or their health and safety officer.

Outline of the hazards

The information presented below is provided to assist in considering the hazards and preparing a risk assessment. It does not supersede or replace any professionally produced guidance.

Hazards during a flood

These are a direct result of the flood water:

- Fast flows sweeping away people, vehicles, plant/machinery and animals.
- Depth of water filling basements to ceiling level and sometimes ground floors to the same.
- Even in summer, flood water is often cold causing a risk of hypothermia from prolonged immersion.
- In winter, the risk of hypothermia from immersion in water can cause death.
- Electric shock from live cables/equipment.
- Build-up of mains or bottled gas where flood water has extinguished the appliance but gas continues to be supplied, causing a potential fire and explosion hazard.
- Biological hazards from sewage works, farms (manure heaps) or dead animals etc contaminating the water.



- Chemical hazards from factories, warehouses or vehicles, even household cleaning/decorating products entering the water.
- Known waterborne diseases and parasites which can infect people and animals.
- There are additional hazards within the water, often unseen.
- Sharp objects, broken glass etc. causing cuts and similar injuries.
- Fencing, fallen wires, garden furniture, street furniture, small plant/tools etc. causing trip hazards.
- Uneven ground, curbing/edging causing trip hazards.
- Soft ground causing people and vehicles to become stuck in the water.
- Bridges damaged or washed away unseen under water.
- Buildings undermined or structurally weakened by the flood with potential to collapse without warning.
- Displaced inspection covers (manholes), drain covers/grids/grates and cellar/basement access hatches causing sudden loss of footing with possible drowning hazard.
- Suction flows into open drain/sewer pipes or inspection chambers dragging people under water with possible drowning hazard.

These hazards have caused numerous deaths or serious injuries over recent years. Anyone working in flood water should be aware of the dangers and take appropriate precautions.

Managers/employers should brief their staff before committing them to working in flood water. They should ensure risk assessments have been carried out and appropriate safety procedures are in place.

Residual hazards after a flood

When flood water recedes, there is often a deposit of silt/mud left behind. This contains a mixture of topsoil and anything else washed into the water. Some of the remaining hazards include:

- Biological hazards from human and animal waste within the silt and in sandbags.
- Biological hazards from dead animals and livestock washed up by the flood.
- Biological hazards from rotting food in domestic and commercial premises.
- Chemicals from vehicles, household cleaning products etc. factories or warehouses within the silt and sandbags.
- Debris left behind causing trip hazards.
- Exposed drains/sewers/inspection chambers and other cavities causing trip hazards.
- Buildings, structures, and street furniture left in a dangerous structural condition by the flood.



Guidance is available on several websites on basic precautions to be taken to minimise risk from the above.

Hazards during early re-entry and repairs to premises

During pumping or early renovation work, the following have potential to cause serious injury or loss of life:

- Danger from a build-up of mains/bottled gas inside premises.
- Danger of electric shock from mains/generator supplies in a wet environment.
- Danger of carbon monoxide poisoning from exhaust gasses due to burning fuels in confined spaces (petrol/diesel/LPG generators and pumps, portable oil/LPG heaters etc.).
- Danger from damaged/weakened flooring giving way.
- Danger from structural damage or instability to buildings.

Many of the above hazards are covered by guidance on construction industry work practices. There is guidance on several websites about re-entering premises and the basic precautions to be taken.

The further problems noted below will add to the delays and frustrations of reoccupying premises safely:

- Potential contamination of mains water supplies until checked and confirmed safe.
- Potential contamination of wells and similar private water supplies by flood water.
- Normal sewerage service inoperable until treatment works and pumping stations have been repaired and/or restored.
- Mains gas service unsafe until pipes are purged of water and confirmed safe.
- Mains electricity unavailable until service cables and meters are checked and repaired/confirmed safe.
- Fungus or mould spores causing a health hazard.

Derbyshire County Council Emergency Planning Team hold details of organisations that offer advice on guidance on remedial work, primarily for the public but some may be applicable to responding organisations undertaking restoration work.

It is not intended to reproduce each organisation's risk assessments and guidance here. Staff should enquire within their own organisation for the appropriate information.



Appendix F - Environmental considerations

During a serious flood, the priority is preservation of human life, followed by preservation of animals and the safety/continued functioning of critical national infrastructure.

It is not often possible to give high priority to the environment in the early stages of the incident, but particularly during the recovery and clean up phase, appropriate safeguards can minimise damage to the environment from the flood.

Information about the environment

Various features of the natural and built environment are recorded by those agencies responsible for environmental protection and heritage conservation.

Natural environment

The following is a list of designated sites relating to the natural environment:

- ancient woodland
- local nature reserve (LNR)
- national forest
- national nature reserve (NNR)
- regionally important geological sites (RIGS)
- registered wildlife sites
- sites of special scientific interest (SSSI)
- special areas of conservation
- special protection areas (SPA)

Many watercourses including some canals and drains are routinely monitored by the EA and the water quality reported annually on their website.

In addition, there may be other sites listed locally or conservation projects which are not on designated sites. The following organisation may have information on designated sites and local projects:

- city or county council conservation officers (information is held on GIS for the county council's area)
- Natural England
- National Trust
- National Forest Authority
- Peak District National Park Authority
- Environment Agency
- Forestry Commission
- water companies.
- Canal and River Trust
- Defra
- estates offices of large rural landholdings.



Local conservation groups (contact and project details for most will be known to Natural England or local authority conservation officers).

Because of the large land areas at risk of flooding, identifying the many natural environment sites has not been attempted for this plan. Only the National Forest and Peak District National Park have been noted where appropriate.

Built environment

The following is a list of designated sites relating to the built environment:

- areas of archaeological importance.
- conservation areas.
- listed buildings grade I.
- listed buildings grade II*.
- listed buildings grade II.
- registered sites and monuments.
- scheduled ancient monuments.
- world heritage sites (Derwent Valley Mills).

In addition, there may be other sites listed locally or conservation projects which are not on designated sites. The following organisation may have information on designated sites and local projects:

- City or county council conservation officers (information is held on GIS for the county council's area and comparable data is held by the city council for its area).
- Building/development control officers of local authorities or the Peak Park Authority.
- English Heritage.
- National Trust.
- Local conservation groups (contact and project details for most will be known to English Nature or local authority conservation officers).
- Local conservation/restoration groups.

Because of the large areas at risk of flooding, identifying the many built environment sites has not been attempted for this plan. Only the significant world renowned features of the Derwent Valley Mills have been listed where appropriate.



Protecting the environment

The main consideration is to minimise the impact of flood water damaging structures or depositing contamination. It may not be possible to stop water affecting aspects of the environment but simple actions before the flood can reduce the impact.

The owner of any item or materials which ends up in flood water is responsible for their final safe disposal. A table disposal of debris has been included later in this section advising on the responsibilities for disposing of various items after a flood.

Domestic precautions

- Prevent flood water entering houses, garages, sheds etc if possible.
- Remove contaminants such as paint, oil, bleach, household and garden chemicals to prevent pollution entering the water or store them above the flood height.
- Secure garden furniture, rubbish bins etc. preventing them being washed into watercourses and causing an obstruction.
- Arrange to remove pets to a safe place during a flood.
- Those living alongside watercourses should remove items from the garden or grounds which may be washed away, preferably before a flood.

Industrial precautions

- Prevent flood water entering buildings, garages, sheds etc. if possible.
- Remove contaminants such as paint, oil, bleach, chemicals and bulk food stuffs (which constitute pollutants) or store them above the flood height.
- Secure raw materials, tools, plant etc. to prevent them entering water causing pollution or being washed into watercourses and causing an obstruction.
- Arrange to remove livestock to a safe place during a flood.
- Those with premises alongside watercourses should remove items which may be washed away before a flood.

Remediation after a flood

This action falls within the remit of the Strategic Recovery Plan and its associated topic sheets.



Disposal of debris

One of the long standing issues following a flood is the removal and correct disposal of debris including household effects, spoiled food, silt, used sandbags, animal carcasses, trees etc. If left in place, such items can obstruct watercourses and create further flooding, become a public health hazard or become a nuisance to others.

Some small items may be placed in domestic or business waste collection bins but larger items will require specialist collection. All aspects of waste collection and disposal are licensed by the EA and only the local authority or agency licensed contractors should be used. The EA has the authority to re-open closed landfill sites for the disposal of contaminated flood damaged property and waste.

The basic arrangements are set out below.

Items	Method
Spoilt food from domestic refrigerators and freezers (seek guidance from insurance company about recording the loss before disposal).	 Householders may take the items to a civic amenity site or place in rubbish bin for local authority collection. Special local authority waste collections may be arranged if many properties have been affected.
Spoilt food from commercial premises (seek guidance about recording the loss before disposal).	 Use the normal commercial waste collection service or; Businesses may employ a (licensed) waste collection and disposal company.
Household effects, furniture, etc. (subject to insurance claim).	 The insurer will normally arrange disposal or release the property for the householder to dispose of. Small items may be placed in rubbish bins for normal waste collection. Local authorities operate special waste collection services for large domestic items but some may charge for this (the fees may be waived at the discretion of the local authority in some situations). Local authorities may arrange special waste collections in affected areas but cannot take items legally owned by insurers or finance companies. Householders may employ a (licensed) waste collection and disposal company but they should not dispose of items legally owned by insurers or finance companies without prior permission. Furniture if reusable could be donated to a charity with prior permission.



Items	Method
	• If the items begin to create a public nuisance, the local authority may intervene (as a last resort) and dispose of them but may charge for this action.
Household effects, furniture etc. (not part of an insurance claim).	 Small items may be placed in rubbish bins for normal waste collection. Local authorities operate special waste collection services for large domestic items, but some may charge for this (the fees may be waived at the discretion of the local authority in some situations). Local authorities may arrange special waste collections in affected areas but cannot take items legally owned by insurers or finance companies. Householders may employ a (licensed) waste collection and disposal company. Furniture if reusable could be donated to a charity. If the items begin to create a public nuisance, the local authority may intervene (as a last resort) and dispose of them but may charge for this action.
Business effects, spoilt stock, damaged equipment etc.	 The Insurer will normally arrange disposal or release the property for the business to dispose of. Use the normal commercial waste collection service (if agreed by the insurer). Businesses may employ a (licensed) waste collection and disposal company (if agreed by the insurer). If the items begin to create a public nuisance, the local authority may intervene (as a last resort) and dispose of them but may charge for this action.



Items	Method
Silt or debris deposited on public roads, footpaths or other public places. The EA can advise on methods of disposing of silt. Silt should not be dumped into watercourses.	 The owner of the items deposited is responsible for clearance, but it may not be possible to identify them. The owner (if known) may use a (licensed) waste collection and disposal company. The local authority responsible for the highway, footpath or public space will arrange clearance of debris otherwise. Debris on designated trunk roads and motorways will be cleared by contractors on behalf of the National Highways.
Debris deposited on private land, domestic gardens or business premises (including trees, animal carcases, silt etc). Many farm animals have unique identity numbers, often on ear tags. They could be used to trace owners using the stock records held by animal movement licensing teams of the City or County Council. There are special rules for disposing of certain animals outlined later in this appendix. The EA can advise on methods of disposing of silt. Silt should not be dumped into watercourses.	 The owner of the items deposited is responsible for clearance, but it may not be possible to identify them. The owner (if known) may use a (licensed) waste collection and disposal company. Items of unknown origin are the responsibility of the landowner to remove using a (licensed) waste collection and disposal company. Local authorities may assist landowners (at the authority's discretion) with debris removal in some circumstances. If the items begin to create a public nuisance, the local authority may intervene (as a last resort) and dispose of them but may charge for this action.



Items	Method
Debris deposited in or immediately alongside designated main rivers (including trees, animal carcases, silt etc). Many farm animals have unique identity numbers, often on ear tags. They could be used to trace owners using the stock records held by animal movement licensing teams of the City or County Council. There are special rules for disposing of certain animals outlined later in this appendix. The EA can advise on methods of disposing of silt. Silt should not be dumped into watercourses.	 The owner of the items deposited is responsible for clearance, but it may not be possible to identify them. The owner (if known) may use a (licensed) waste collection and disposal company. If the owner is unknown, the riparian landowner is responsible for clearing debris from the watercourse channel and land alongside if the debris could be washed into the watercourse. The riparian landowner may remove the debris using a (licensed) waste collection and disposal company or specialist contractor. If the debris could increase the risk of future flood (in the opinion of the EA) if not removed, they may undertake to clear the debris using its staff or contractors. If the items begin to create a public nuisance, the local authority may intervene (as a last resort) and dispose of them but may charge for this action.
Debris deposited in or immediately alongside ordinary watercourses (including trees, animal carcases, silt etc). Many farm animals have unique identity numbers, often on ear tags. They could be used to trace owners using the stock records held by animal movement licensing teams of the City or County Council. There are special rules for disposing of certain animals outlined later in this appendix. The EA can advise on methods of disposing of silt. Silt should not be dumped into watercourses.	 The owner of the items deposited is responsible for clearance, but it may not be possible to identify them. The owner (if known) may use a (licensed) waste collection and disposal company. If the owner is unknown, the riparian landowner is responsible for clearing debris from the watercourse channel and land alongside if the debris could be washed into the watercourse. The riparian landowner may remove the debris using a (licensed) waste collection and disposal company or specialist contractor. The local authority with land drainage responsibility in the area (city/district/borough council) may arrange to carry out the work but reserves the right to charge for this at the council's discretion. If the items begin to create a public nuisance, the local authority may intervene (as a last resort) and dispose of them but may charge for this action.



Items	Method
Debris stuck under bridges or in culverts or on weirs on designated main rivers or on ordinary watercourses (especially trees). The EA stance for designated main rivers is that the debris would flow downstream but for the bridge, culvert or weir, therefore the debris owner, if known, or the structure's owner is responsible for removing any debris caught by it. Land drainage officers may adopt a similar approach for ordinary watercourses. The riparian landowner includes the highway authority, railway operator or landowner under which the watercourse flows.	 The owner of the items deposited is responsible for clearance, but it may not be possible to identify them. The owner (if known) may use a (licensed) waste collection and disposal company or other specialist contractor. If the owner is unknown, the riparian landowner is responsible for clearing debris from the watercourse channel and land alongside if the debris could be washed into the watercourse. The riparian landowner may remove the debris using a (licensed) waste collection and disposal company or specialist contractor.
Disposing of used sandbags.	 Small quantities of used sandbags may be placed in rubbish bins for normal domestic or commercial waste collection. Small quantities of sandbags may be emptied onto gardens and mixed with topsoil, allowing any bacteria to break down by natural means. Large quantities of sandbags (such as those used for large area defences) may need collecting by the local authority. Large quantities of sandbags set up on commercial premises may be removed by a (licensed) waste collection and disposal company.

Disposal of animal carcasses

Domestic pets are normally disposed of in line with guidance from local authority environmental health officers.

The Animal By-Products Regulations 2005 (implemented under European Union directives) requires that any person in possession or control of the dead animal is responsible for its timely and correct disposal. These were amended in 2009 and further amendments took effect in April 2011.



Where the animal's owner can be identified (most farm animals will have tags or other markings which can be checked against databases) the owner is obliged to make the necessary arrangements. This is usually by rendering or incineration by an approved disposer.

Where the animal's identity cannot be confirmed, the landowner or occupier is "in possession or control" of the carcass and must make arrangements for correct disposal. Local authority animal health teams will be able to advise landowners/occupiers on the correct actions in such circumstances.

There is debate over who controls watercourses as the EA have powers over designated main rivers and land drainage authorities (local authorities in Derbyshire) have powers to control activities on ordinary watercourses. Owners of land adjacent the watercourse have in effect ownership of half the width of the watercourse and are often asked to clear debris to maintain the flow of the river, brook or stream.



Glossary

A lexicon of acronyms, abbreviations and terminology has been developed to aid interoperability within the Joint Emergency Services Interoperability Principles (JESIP). This is included within the LRF Major Incident Procedures incorporating Strategic and Tactical Management Guide and JESIP principles.

The terms included in the lexicon may not all be used in this plan but may be used during an incident.

Both the LRF Major Incident Procedures incorporating Strategic and Tactical Management Guide and JESIP principles are available on ResilienceDirect, the Major Incident Procedures are also accessible via <u>https://www.derbyshireprepared.org.uk.</u>

Other terminology specific to this plan only

EFS	Extended Floodline Service	Part of the EA floodline service to address the number of non-remit calls received, and answer questions on behalf of local councils or refer accordingly.
	Flash flood	The common usage of the description is a flood which occurs suddenly with little warning.
		The EA has identified certain types of river valley where the confines of the valley sides and gradient of the riverbed meet their criteria to pose a risk of flash flooding. The emphasis of the criteria is the destructive effect as witnessed at Boscastle rather than a general sudden flood.
	Flood alert	The lowest grade of flood warning issued by the EA. Flooding of land and some roads may be expected but not flooding of property. See page C2 for further detail.
FAS	Flood Advisory Service	The flood advisory service teleconference is an integrated service provided by the EA and the Met Office either via email or MS Teams.
FFC	Flood Forecasting Centre	A joint unit using staff from the Met Office and EA to produce national summaries of

The following list of acronyms, abbreviations and terminology are applicable specifically to this plan.



		forthcoming weather or tides which may produce flooding.
	Floodline	A telephone information service operated by the EA for the public, giving recorded information on latest flood warnings.
FGS	Flood Guidance Statement	This provides information for Cat 1 and 2 responders to help them with their emergency planning and resourcing decisions. It gives an overview of the 5-day flood risk for England and identifies possible severe weather, which could cause flooding and significant disruption to normal life. Highlights risk for all types of flooding -
		river, groundwater, and surface water flooding all in one place.
FRTAs	Flood Rescue Tactical Advisors	In 2013 Defra developed a cadre of FRTAs, who are specialists from the flood rescue sector available to respond nationally as required.
	Flood warning	The level of warning issued by the EA to indicate that flooding of property and more extensive areas of land is now expected. See page C3 for more detail.
FWA	Flood warning area	The areas at risk of flooding (mostly river flooding) where a flood warning service is available from the EA. A flood warning area is typically a village, suburb or similar compact area.
FWS	Flood warning service	A multimedia messaging system operated by the EA to deliver flood warning messages to the public and partner agencies via telephone, mobile phone, email and SMS text messaging.
	Flood zone	Areas designated and depicted on maps as being at risk of flooding by the EA, different zones according to probability of flooding.
LLFA	Lead Local Flood Authority	Role, responsibilities and duties placed on Derbyshire County Council and Derby City Council under the Flood and Water Management Act 2010.
MAFP	Multi-Agency Flood Plan	An emergency plan used by various agencies working together during the response to a flood.



NFF	National Flood Forum	A national charitable organisation which offers advice to those affected by flooding and often represents the interests of those flooded.
NSWWS	National Severe Weather Warning Service	That service provided as part of the public weather services within the Met Office to identify and warn of weather conditions likely to cause disruption in any part of the UK.
PWS	Public Weather Service	The weather services for the general public produced by the Met Office and funded by the Government. It includes the weather forecasts in the media and warning services for severe weather.
SFRA	Strategic Flood Risk Assessment	This is a flood risk assessment carried out by local authorities to determine those areas where special controls may be needed to limit development in areas at risk from flooding.
	Severe flood warning	This is the level of warning issued by the EA, often in consultation with partner agencies, to indicate extensive flooding of property and large areas of land is now expected. See page C4 for more details.
	Warnings no longer in force	A message issued by the EA to denote that previously issued flood alerts or flood warnings for an area have now been withdrawn as the situation is improving.

