Derbyshire Prepared

Local Resilience Forum

Multi-Agency Flood Plan

Version 3.0

November 2020

Contents

Document control

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

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versions of the plan may be printed, however these will be uncontrolled copies and should be disposed of securely if superseded or no longer required.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

Version History				
Version	**Date**	**Detail**	**Author**	**Approver**
1.0	31/03/2016	Annual update, plan restructure and formatting changes.	Stephen Peace	Nick Elliott
2.0	31/03/2018	Annual update	Stephen Peace	Joanna Procter
2.1	31/10/2018	Interim update	Stephen Peace	Liz Partington
3.0	31/11/2020	Annual update incorporating new MAFP guidance & lessons learnt.	Stephen Peace	Liz Partington

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03	Emergency centre	Derby City Council

1   Background information

1.1 Introduction

This flood plan has been produced in line with Defra guidance on developing multi-agency flood plans 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 which adopts the Joint Emergency Services Interoperability Principles (JESIP) and the current emergency procedures of each organisation, and the Derbyshire LRF Strategic and Tactical Management Guide for Major Incidents.

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 contingency plan. 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 community risk registers. These risk assessments are reviewed regularly, and the current risk ratings are summarised below:

City/district/borough area	Fluvial flood risk HL19	Pluvial flood risk L5	Flash flood risk HL20
Amber Valley	High	High	No hazard
Bolsover	Medium	Medium	No hazard
Chesterfield	High	High	No hazard
Derby City	Very high	High	No hazard
Derbyshire Dales	High	High	High
Erewash	Very high	High	No hazard
High Peak	High	High	High
North East Derbyshire	High	Medium	Medium
South Derbyshire	Very high	Medium	No hazard
All Derbyshire	Very high	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.

1.6 Aim 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 be used during a flood incident.

Plan
Human Aspects Plan
Data Sharing (Vulnerable People) Agreement
Major Incident Procedures
Resilient Communications Plan
SCC Activation Plan
Severe Weather Plan
Strategic and Tactical Management Guide for Major Incidents
Strategic Recovery Plan
Warning and Informing Plan

The documents listed above can be accessed through ResilienceDirect or with liaison 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 normal services at an appropriate level • 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.

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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 the 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 the all responders section above for shared roles and responsibilities

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 the 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	Response	Recovery
Derbyshire Constabulary	• Maintain the arrangements for Strategic Command and Control (SCC) at Joint Police and Fire HQ. Consider virtual SCC via Teams or other suitable system. • See the all responders section above for shared roles and responsibilities	• Assess the developing situation and allocate police resources as necessary. • Set up flood protection apparatus for police premises at risk of flooding and arrange to relocate equipment, vehicles and services as necessary. • Chair the TCG and/or SCG and media cell • Co-ordinate the response of the emergency services. • Establish cordons to facilitate the work of the other services. • Establish access and egress routes for the emergency services. • Request assistance from the coastguard, cave/mountain rescue organisations, military or RNLI (inland water rescue scheme) if needed. • Provide help with any evacuation required. • Protect and secure property in flooded areas to the extent possible in the prevailing circumstances. • Collect and process casualty information and identification and removal of the dead. • See the all responders section above for shared roles and responsibilities	• Assist in the arrangements for recovery. • Continue to protect previously flooded property until normality is restored. • Continue to assist in arrangements for access and egress until transport disruption is reduced. • Reinstate police property or equipment damaged by the flood. • Participate in reviews to improve response or services. • See the 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 the 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 the 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 the all responders section above for shared roles and responsibilities
East Midlands / North West Ambulance Services	• See the all responders section above for shared roles and responsibilities.	• Provide emergency medical treatment for casualties, including those in flooded areas. • Arrange to evacuate casualties to hospitals using air ambulances, boats or specialised vehicles 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 the all responders section above for shared roles and responsibilities.	• See the 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 the 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 Highways England role). • Continue to provide public information jointly with other agencies. • Liaise with community flood wardens/groups as appropriate. • See the 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 the all responders section above for shared roles and responsibilities.

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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 the 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 Highways England role). • Assist with flood alleviation measures such as issuing filled sandbags and attending to land drainage problems. • See the 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 the 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 the 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 the 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 the all responders section above for shared roles and responsibilities.

Organisation	Planning	Response	Recovery
Community groups • Parish councils • Town councils	• Learn of flood risks that could 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 measures.	• Stay aware of developing conditions via 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 closure of flooded roads.	• Guide people to sources of 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 by the flood.

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.
Highways England (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 the 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 the 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 the 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 pre-determined 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 structures (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.
Public Health England	• Prepare advice for the public and health professionals on the effects of flooding and make available via the PHE website. • Provide public health support and advice to agencies at the local, regional and national level • Support co-ordination of the NHS response • See the 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 the all responders section above for shared roles and responsibilities.	• Provide support to NHS England local area teams and Clinical Commissioning Groups 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 the all responders section above for shared roles and responsibilities.

Organisation	Planning	Response	Recovery
NHS England local area teams	• See the all responders section above for shared roles and responsibilities.	• Co-ordinate the NHS response to flooding • See the 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 the 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 the 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 the all responders section above for shared roles and responsibilities.	• See the 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 page 31.

The response is initially demand led, based on the number of requests for assistance.

Activation procedure

The triggers are summarised below:

Trigger	Response

ALERT
 	
Receipt of severe weather alerts for heavy rain (issued more than 24 hours ahead).
 	
and/or
 	
Flood Alerts
 	
and/or
 	
Flood Guidance Statement (FGS) YELLOW (low risk).
	• Raised awareness by responding agencies including:
	  - Monitoring EA and Met Office websites and hazard manager for updates.
	  - Distribution of alerts within responding agencies.
	  - FAS email alert and communication with local EA, Met Office and Flood Forecasting Centre representatives.
	  - Encourage the public to remain aware of the developing situation and prepare for possible flooding.
	  - DCC and EA Liaison with local flood wardens
	
	NB: On receipt of yellow level warning on FGS identifying Derbyshire at risk, the Derbyshire County Council Emergency Planning Team will consider the following factors:
	  • Timing/day/weekend
	  • Current ground conditions
	  • Localised warnings
	
	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
	  - Filling sandbags for possible use
	  - Encourage the public to remain aware of the developing situation and prepare for possible flooding.

Trigger	Response

WARNING
 	
Receipt of severe weather warnings for heavy rain (issued less than 24 hours ahead).
 	
and/or
 	
Flood Warnings
 	
and/or
 	
Flood Guidance Statement (FGS) AMBER (medium risk).
	• 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 C14).
	  - Continued liaison with local flood wardens
	
	• 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 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.
	• 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
 	
Severe flood warning(s) issued (indicate a worsening situation for any flood risk area where there is deemed to be a significant threat to life).
 	
Flood Guidance Statement (FGS) RED (high risk).
 	
Decision to issue made through discussion with tactical agencies. The EA reserves the right to issue in an emergency.
	• EA, riparian landowners and some councils:
	  - continue inspections of culverts and flood control structures.
	  - 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 MHCLG RED, sometimes at government request.
	• 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.
	• Staff and other resources are redeployed to enhance response capability.
	• Consider requesting military assistance via Joint Regional Liaison Officer (JRLO)
	• Additional staff and/or resources are obtained to meet increasing demand.

Trigger	Response
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 (strategic / tactical) 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.
Receipt of flood alerts.	• EA, riparian landowners and some councils: - Enhance inspections of culverts and flood control structures. - Carry out urgent clearance of watercourses, culverts etc. - Begin operating selected flood control mechanisms. • Other organisations take no special action at this time. • Services respond to flood incidents using normal mechanisms. • The public are encouraged to remain aware of the developing situation and prepare for possible flooding.
Receipt of flood warnings.	• EA, riparian landowners and some councils: - continue inspections of watercourses, culverts and flood control structures. - operate selected flood control mechanisms. • Other organisations take no special action at this time. • Flooding at this level generally has only a limited impact. • Services respond to flood incidents, initially using normal mechanisms. • A large number of flood incidents would initiate formal command structures (strategic / tactical) to be considered. • Public information is initiated to provide details of affected areas, road closures etc. • Some organisations take 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(s).
	• 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.

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	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.

Request	Action
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 occasionally 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 retained some 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 October 2020.

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 entered into an agreement 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 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 Fire and Rescue Service National Coordination Centre (FRSNCC). - 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 bi-lateral 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 strategic command (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 MHCLG RED or any multi-agency SCG/LRF Response Co-ordinating Group (ResCG) arrangement setup by MHCLG.

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 Derbyshire 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 information sharing 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 Highways England if trunk roads or motorways are involved.

Highways teams receive flood and weather warning messages directly so are able to 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.

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 LRF documents:

- JESIP & the Joint Decision Making model.
- SCC Activation Plan.
- Major Incident Procedures (on scene command and co-ordination).
- Strategic and Tactical Management Guide for Major Incidents (remote command and co-ordination).

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 Derbyshire LRF's Major Incident Procedures**.**

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 multi-agency 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

1. Be aware of current flood warning messages. Maintain awareness of road closures and diversions affecting resource deployment.

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 Highways England 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 12 on page A3.

5. Notify services, command personnel, etc. as per list below.

Notify

1. Fire and rescue service (confirm aware).

2. Ambulance service (confirm aware).

3. Force Incident Manager (FIM).

4. County council's emergency planning team:

   Office hours: Telephone 01629 538364
   Out of office hours: duty emergency planning officer mobile – ************

5. Highways England if applicable – contact regional control centre ************

6. FIM to consider notifying duty critical incident manager (CIM) for escalation.

7. Force operational communications (Airwave) tactical advisor.

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 case of large casualty numbers potential fatalities and people unaccounted for.

9. Police documentation teams(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 the JESIP principles.

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.

Police incident commander

1. Report to the FCP/RvP (if established) as directed by the force operations room.

2. Maintain liaison with the fire and rescue and ambulance services incident commanders and other responding agencies personnel. Consider the use of inter-agency radio communication.

   Agencies using Airwave radio communications have the ability to 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 Derbyshire LRF Major Incident Procedures.

   Primarily the following talk groups are available for use:

************	Sharers hailing group
************	For tactical inter-agency communication
************	For operational inter-agency communication For operational inter-agency communication For operational inter-agency communication
************	For air to ground communication
************	All users inter-agency talkgroup

3. Co-ordinate the emergency services response in conjunction with the respective incident commanders using JESIP.

4. Liaise with the county council's emergency planning team via force operations room.

5. Consider implementing an evacuation if necessary and appropriate, in liaison with the fire and rescue and ambulance services incident commanders and the local authority's emergency planning team. (If the decision is made to evacuate appoint an evacuation officer.)

   NB: There are details of some vulnerable premises contained in the flood risk annexes to this plan. Give regard to prioritising the evacuation as necessary.

6. Advise the force operations room regarding the continuance of the road diversions/need for any additional road diversions in a deteriorating situation.

7. Establish and arrange supervision of the declared RvP as directed by the force operations room.

8. Deploy police resources as required.

9. Provide regular operational updates to the force operations room.

10. Hold regular briefing sessions with the responding agencies incident commanders and any other agencies involved using JESIP.

11. Control the press/media representatives. Request the attendance of force media relations officer if necessary.

12. Liaise with the senior investigating officer (if appointed).

Fire and rescue service action sheet

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.

   Details of some vulnerable premises and suggested RvPs are given in flood risk annexes to this plan.

5. Communicate with EA.

6. Liaise with Derbyshire County Council's Emergency Planning Team for:

   - advice
   - equipment
   - resources
   - facilities for any evacuees.

   Office hours: 01629 538364
   Out of office hours: contact duty emergency planning officer ************

7. Liaise with electricity supply companies for confirmation of safe areas of work.

8. Consider officers to attend tactical and strategic command 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 and rescue incident commander

1. Report to incident or FCP/RvP (if established) as directed by fire control.

2. Consider the following:

   The use of inter-agency radio communications with the police and ambulance service incident commanders.

   Agencies using airwave radio communications have the ability to 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 Derbyshire LRF Major Incident Procedures.

   Primarily the following talk groups are available for use:

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************	For operational inter-agency communication For operational inter-agency communication For operational inter-agency communication
************	For air to ground communication
************	All users inter-agency talkgroup

3. Make an initial situation report to fire control using M/ETHANE, and confirming resources required.

4. Save life and rescue casualties 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. Arrange response to 999 requests related to flood situation.

3. Share any relevant information with other emergency services and confirm M/ETHANE.

4. Inform on duty ambulance staff 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 managers and Trust Strategic Commander of any flood related concerns. Where required mobilise a manager as incident commander with appropriate Tactical Advisor/NILO support. Upon confirmation of arrival advise them of the actions numbered 1 to 16 on page A8.

6. Notify the ambulance service on-call resilience manager.

7. Communicate information to Derbyshire County Council's Emergency Planning Team.

8. Inform the on-call manager(s) for Public Health England, NHS England who will then inform the Clinical Commissioning Groups.

9. Activate flood/major incident plans in response to actual incidents with due regard to assisting with vulnerable patients.

10. Liaise with East Midlands Ambulance Service NHS Trust communications staff regarding press release etc.

Consider

1. Activating major incident plan/notify National Ambulance Co-ordination Centre (NACC) considering the request for mutual aid as required.

2. Mobilisation of the hazardous area response team (HART) resources to support water rescue

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)

5. Mobilisation of incident support units

6. Mobilisation of decontamination team and equipment

7. Mobilisation of additional medical support teams if required

8. Notifying NHS England North Midlands on-call to request mobilisation of patient transport service providers to assist with movement of vulnerable people.

9. Despatch liaison officers to designated hospitals or other appropriate locations

10. Initiating Divisional Business continuity arrangements to retrieve essential equipment and transfer vehicles/staff to safe locations if service premises are at risk from the flood.

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 situation report to EOC using M/ETHANE.

4. Identify the rendezvous point (RvP) and arrange ambulance loading points and a casualty clearing station. Inform ambulance service emergency operations centre of the locations.

5. Establish liaison 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).

    Agencies using airwave radio communications have the ability to 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 Derbyshire LRF Major Incident Procedures.

    Primarily the following talk groups are available for use:

************	Sharers hailing group
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************	For operational inter-agency communication For operational inter-agency communication For operational inter-agency communication
************	For air to ground communication
************	All users inter-agency talkgroup

6. Commence ambulance service incident log.

7. Working with multi-agency partners 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 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, eg nursing homes etc.

14. Agree the provision of information to the responding media via EMAS communications team and other agencies.

15. Operate scene and locality management procedures as per EMAS NHS Trust Major Incident Plan, as appropriate, for suitable control of the incident.

16. As the incident progresses, advise the EOC accordingly with an updated M/ETHANE report.

17. At the end of the incident complete log and forward to EMAS 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):

   - 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 recalling staff working at district/borough/city 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.

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 room B273 (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:

   - 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 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.
- MHCLG RED.
- PHE.
- 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 have the ability to 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 Derbyshire LRF Major Incident Procedures.

  Primarily the following talk groups are available:

************	Sharers Hailing Group
************	For tactical inter-agency communication
************	For operational inter-agency communication For operational inter-agency communication For operational inter-agency communication
************	For air to ground communication
************	All users inter-agency talk group

7. Notify:

   - County and city social care functions.

   - Director of public health for Derbyshire County and Derby City councils.

   - Cabinet member/portfolio holder.

   - Strategic Director of ETE.

   - City and district/borough communications officers.

   - Local elected member(s) of affected areas, if possible.

8. If requested arrange for rest centre(s) 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.

- MHCLG RED who may request regular situation reports.

13. Check the status of flood warnings and severe weather warnings:

- Check the EA website 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 tactical/strategic command 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 MHCLG 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

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 five-day overview of UK wide flood risk is also available for public viewing on gov.uk. (https://flood-warning-information.service.gov.uk/5-day-flood-risk)

The telephone, SMS and email messages issued by Flood Warning Service have details of the areas at risk and sometimes include specific premises or roads. The gov.uk 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. Warnings are also available on social media platforms such as Facebook and Twitter, as well as mobile apps.

Flood warning codes

Flood alert

FLOOD ALERT

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

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.

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Flood warning

FLOOD WARNING

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

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 gov.uk website and Floodline will be updated at least every 8 hours, or when the situation changes.

Severe flood warning

**SEVERE FLOOD
WARNING**

Severe flooding. Danger to life.

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.

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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:

- Flood Warning Service (FWS). 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 gov.uk website to speed access to information on local rivers.

- The Gov.uk pages, 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 Flood Warning Service failure, the EA area flood resilience team would email partners to make them aware of the situation and update them on the flooding status. Flood warning information should still be able to be displayed on the gov.uk 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.

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

Flood warning area	River	Local authority area
Ambaston	River Derwent	SD
Ambergate	River Amber/Derwent	AV
Ashbourne	Henmore Brook	DD
Ashford in the Water	River Wye	DD
Bakewell	River Wye	DD
Barrow upon Trent	River Trent	SD
Baslow and Bubnell	River Derwent	DD
Belper	River Derwent	AV
Bradwell	Bradwell Brook	HP & DD
Duffield	River Derwent	AV
Egginton	Egginton/Hilton Brook	SD
Elvaston	River Derwent	SD
Foston and Scropton (prov)	River Dove	SD
Grindleford	River Derwent	DD
Hathersage	River Derwent	DD
Matlock	River Derwent/Bentley Brook	DD
Shardlow	River Trent/Derwent	SD
Stoney Middleton (prov)	Dale Brook	DD

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
Bonsall	Unamed	DD
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	East Midlands (EMD)	River Amber at Ambergate	AV
Bottle Brook in Derbyshire (Bottle Brook and tributaries from Denby to River Derwent at Little Eaton)		Bottle Brook at Rawsons Green	AV
		Bottle Brook at Lower Kilburn and Coxbench	AV
		Bottle Brook at Little Eaton	AV & ER
Upper Derwent in Derbyshire (including tributaries from Ladybower Reservoir to the River Wye at Rowsley)		River Derwent at Bamford including Mytham Bridge	DD & HP
		River Derwent at Hathersage	DD
		River Derwent at Grindleford	DD
		River Derwent at Calver	DD
		River Derwent at Baslow and Bubnell	DD
		River Derwent at Chatsworth	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 (including tributaries from Rowsley to River Trent at Shardlow)	East Midlands (EMD)	River Derwent at Churchtown and Northwood	DD
		River Derwent at Darley Dale	DD
		River Derwent at Darley Bridge	DD
		River Derwent at Matlock	DD
		River Derwent at Matlock Bath	DD
		River Derwent at Whatstandwell inc Cromford and Lea Wood	DD & 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 and Darley Abbey Park	ER & 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 Rocester including Ashbourne)	Staffs, Warwicks & West Mids (SWWM)	Henmore Brook at Ashbourne	DD
		River Dove at Hanging Bridge and Church Mayfield	DD
		River Dove at Norbury & Lower Ellastone	DD
		River Dove from Coldwall Bridge to Okeover	DD
Lower Dove (From Rocester to Clay Mills)		River Dove at Doveridge and Sudbury	DD
		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 Eggington Brook in Derbyshire		Foston Brook at Foston	SD
		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 including Old Station Close and Heage Lane areas	SD
River Ecclesbourne	East Midlands (EMD)	Rivers Ecclesbourne and Derwent at Duffield	AV
River Erewash in Derbyshire and Nottinghamshire (River Erewash and its tributaries from Kirkby in Ashfield to the River Trent at Attenborough)		River Erewash at Pinxton	BO & AV
		River Erewash at Pye Bridge	AV
		River Erewash at Ironville	AV
		River Erewash at Jacksdale *	AV
		River Erewash at Langley Mill	AV & ER
		River Erewash at Ilkeston	ER
		River Erewash and Boundary Brook at Trowell and Stapleford Moorbridge 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
River Mease (From Ashby to Croxall)	Staffs, Warw & W Mids	River Mease at Measham and Netherseal	SD

* 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 (Including Hyde, Ashton-under-Lyne, Denton, Stalybridge and Glossop)	Gr Man, Mersey & Cheshire (GMMC)	River Etherow at Woolley Bridge and Hadfield	HP
		River Etherow at Charlesworth & Melandra	HP
		River Etherow at Broadbottom (properties at risk in Tameside)	HP
		Glossop & Long Clough Brook at Glossop	HP
		River Goyt at Whaley Bridge	HP
River Doe Lea (from Hardwick Hall to Staveley)	Yorkshire	River Doe Lea at Bolsover Coking Works and Netherthorpe	BO & CH
River Rother Upper (Including River Rother and its tributaries from Chesterfield to Staveley)		River Drone at Unstone and Dronfield including trading estate at risk from Barlow Brook	CH & NE
		River Hipper at Brampton	CH
		River Hipper at Central Chesterfield	CH
		Holme Brook at Ashgate	CH
		River Rother at Birdholme	CH
		River Rother at Central Chesterfield	CH
		River Rother at North Chesterfield and Brimington	CH
		River Rother at Tapton	CH
		River Rother at Staveley Business Centre	CH
		River Whitting at Old Whittington	CH
River Rother Lower (Including River Rother and its tributaries from Renishaw to Rotherham)		River Rother at Renishaw	NE
		River Rother at Killamarsh	NE
		River Rother at Holbrook - Sheffield Road Railway Bridge	NE
Burton Trent (From Kings Bromley to Clay Mills)	Staffs, Warwicks & West Mids (SWWM)	River Trent at Catton, Barton under Needwood and Branston Water Park	SD
		River Trent at Riverside areas of Burton upon Trent	SD
River Trent in Derbyshire (River Trent and tributaries in Derbyshire from Newton Solney to Castle Donington)	Derbys, Notts and Leics (DNL)	River Trent at Willington 1	SD
		River Trent at Willington, Repton Road area	SD
		River Trent at Twyford	SD
		River Trent at Barrow upon Trent 1	SD
		River Trent at Swarkestone	SD

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.

Derbyshire Prepared

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

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

Flood alert area	EA area	Flood warning area (within alert area)	LA area
Lower Derwent	EMD	Markeaton and Bramble Brooks at Derby City	AV & DY
Lower Derwent	EMD	Coppice Brook at Belper	AV
Upper Derwent	EMD	Bradwell Brook at Bradwell	DD & HP
Upper Derwent	EMD	Peakshole Water at Castleton	HP
River Erewash in Derbys & Notts	EMD	Golden Brook and Stream at Breaston	ER
River Erewash in Derbys & Notts	EMD	Bailey Brook at Langley	AV & ER
Lower Derwent	EMD	Via Gelia watercourse at Cromford	DD
River Rother Upper	Yorkshire	River Rother and tributaries in Chesterfield	CH

River levels on the internet

The gov.uk 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 http://www.gaugemap.co.uk/ 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**. During flooding, advice on anticipated river levels can be obtained from the flood warning duty officer of the relevant EA area.

River Levels On the Internet (RLOI) can be viewed here: https://flood-warning-information.service.gov.uk/river-and-sea-levels

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 gov.uk 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 service and is emailed out to Category 1 and 2 responders.

Flood advisory service (FAS)

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

Item	Subject	Time	Lead
1	**Introduction, welcome and confirm attendees** *State reason for holding the teleconference*		EA (ABC)
2	**Weather situation** *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.*	5 mins	Met Office (PWS Advisor)
3	**Flooding situation** *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.*	5 mins	EA (FWDO)
4	**Operational response** *Outline what we are doing and what we have planned. For example, state if we have been out clearing debris screens or if we have a roster in place for the anticipated impacts.*	5 mins	EA (ABC)
5	**Questions from partners** *An opportunity for partners to ask questions on the weather and flooding situation as discussed in items 2 and 3.*	5 mins	Partners
6	**Updates from 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.*	5 mins	Partners
7	**Next steps in the Multi-Agency Response** *Discuss the requirement to convene tactical or strategic command?* *Date and time of next teleconference (if required).*	5 mins	EA (ABC)
8	**Close**		EA (ABC)

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 Officer 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 Met Office website 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.

Amber Valley Borough Council

	Approx no. of bags	Location and type
Landscape services	600 500	Filled Empty Held at Leafy Lane depot, Heanor
Parish/Town council with sandbags	1,000	Duffield (and sand)

Bolsover District Council

	Approx no. of bags	Location and type
Street services	1,000	Bolsover depot (empty)
Contact centres x 4 Bolsover, Clowne, Shirebrook, South Normanton	1,000 each	Empty bags for public collection

Chesterfield Borough Council

	Approx no. of bags	Location and type
Aqua-sac/Floodsax (inflatable sandbags)	1,640 200 200	Stonegravels Depot Holmebrook Valley Park Poolsbrook Country Pak
Conventional sandbags (and sand)	200 filled 800 filled 1800 empty 100 filled 100 empty 40 filled 100 empty	Stonegravels Depot Hasland Park (+20T sand) Holmebrook Valley Park Poolsbrook County Park

	Approx no. of bags	Location and type
Public sandbag collection point	2,000	Empty sandbags at the Town Hall
Communities with sandbags (empty)	500	Brimington Community Centre
	500	Hasland & St Leonards

Derbyshire County Council

	Approx no. of bags	Location and type
Emergency Planning Team stored in outside store room under stone steps and also room in basement lift corridor 2nd door on right key no. 120 from security office	20,000 When fully stocked	County Hall (central reserve of empty sandbags issued to partner agencies to maintain their service during a flood emergency)
Public sandbag provision (available via Call Derbyshire and by collection from selected libraries)	1,000+	Ten empty sandbags sent by post to the public on telephone/email request
Flood Risk Management Team Floodsax Floodsax (homeowner door packs)	1,200 60	County Hall, Emergency Planning stores Somercotes
Highways Depots Stonegravels Willington Chapel Darley Dale Ambergate	600 650 350 1550 750	Filled sandbags (approx. nos.)

Derby City Council

	Approx no. of bags	Location and type
Streetpride	500	Stores Road depot (filled)
	200	Markeaton Park (filled)
	10,000	Stores Road depot (empty)

Derbyshire Dales District Council

	Approx no. of bags	Location and type
Community services	1,000+ 4,000+	Ashbourne depot (+ sand) Northwood depot (+ sand)
Parish/town councils with sandbags	200 500 200 + Floodsax 100 + Floodsax 500 + Floodsax	Ashford in the Water Bakewell Bradwell (resilience store) Grindleford Stoney Middleton
Public sandbag collection points		Empty sandbags available from Reception, Town Hall

Erewash Borough Council

	Approx no. of bags	Location and type
Green space and street scene	3,000	West Park Nursery, Long Eaton and Merlin House, Ilkeston
Parish/town councils with sandbags	500 1,000 500	Breadsall Ilkeston (held by EBC flood warden) Ockbrook and Borrowash
Public sandbag collection points	 Min 50 Min 50	Packs of ten empty sandbags at Reception, Ilkeston Town Hall Reception, Long Eaton Town Hall Empty sandbags available for collection from the following leisure centres: Rutland Sports Park Sandiacre Friesland Sports Centre West Park Leisure Centre

High Peak Borough Council

	Approx no. of bags	Location and type
Alliance Environmental Services	A limited stock is held for emergency situations - not routinely issued to the public	
	100	Surrey Street Depot, Glossop
	50	Silverlands Depot, Buxton
	50	Whaley Bridge Sport Pavilion off Park Road.
	50	Fieldhead House Workshop, Spire Hollin, Glossop
Parish/town council with sandbags	500	Whaley Bridge

North East Derbyshire District Council

	Approx no. of bags	Location and type
Streetscene	75	Eckington depot (filled)
	500	Eckington depot (empty)
	400	Dronfield Bulk Storage depot (filled)
Public sandbag collection point	2000	NEDDC reception, Mill Lane, Wingerworth
Parish/town council with sandbags		

South Derbyshire District Council

	Approx no. of bags	Location and type
Leisure services (land drainage)	10,000+	Darklands Road depot
Parish/town councils with sandbags	500	Ambaston
	500	Barrow upon Trent
	500	Coton-in-the-Elms
	500 & Floodsax	Foston and Scropton
	500	Hilton
	500	Shardlow (resilience store)

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 Derbyshire County Council and Environment Agency websites.

Boats

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

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

See appendix B contacts for arranging access to these resources.

Derbyshire Fire & Rescue Service

Flood rescue capability	Non-powered boats - Kingsway (Derby), and Buxton *(This is temporary until replacement motors have been purchased).*
DFRS has access to national resilience assets including flood rescue teams available to support a national response to any flooding situation. See page D7	

Also consider neighbouring FRS with access to powered and non-powered boats.

Derbyshire Constabulary

Body recovery team **Not normally used for the rescue of live casualties**	One work boat with outboard motor and trailer based at Police HQ, Ripley. 22 staff trained in cold water awareness of which nine are additionally trained to pilot the boats

The following organisations can be contacted to request if any resources are available:

Amber Valley Borough Council - landscape services (1x small rigid boat with small outboard motor, 9 RYA level 2 trained staff. Not for emergency use but could offer support eg moving of small items).
Derby City Council - park ranger service. Single boat available for use at Darley Park with relevant PPE.
Derbyshire County Council - ETE (countryside service)
Derbyshire County Council - children and younger adults service
Environment Agency – swift water team
Mountain Rescue Teams (MRT) – have capability across the peak district

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.

Derbyshire Fire & Rescue Service

Off-road appliance (Normal appliances are not permitted to travel away from hard standing)	4 x Mercedes Benz Unimog all terrain fire appliance based at Matlock (x2, one fitted with a crane), Glossop and Buxton
Flood rescue capability	Mercedes 4x4 Sprinter vans to transport water rescue capability based at: Kingsway (Derby) and Buxton
Environment Unit	One vehicle based at Alfreton (not 4x4)
DFRS has access to national resilience assets including flood rescue teams available to support a national response to any flooding situation. See page D7	

East Midlands Ambulance Service

Hazardous Area Response Team (HART)	Capability to respond to water rescue incidents. Can deploy inflatable sleds/footpaths and work alongside DFRS. Can request mutual aid from neighbouring authorities who also have HART response capability.

The following organisations can be contacted to request if any resources are available:

Derby City Council – Welfare pod (trailer unit with drying room) for flood response
Derbyshire County Council – ETE (countryside service) & Children's Services
Districts and Boroughs – Some 4x4 vehicles available
Derbyshire Dales District Council - Community Services
Mountain Rescue Teams (MRT)
Peak Park Ranger Service

See appendix B for contacts.

Pumps

Emergency services and local authorities

See appendix B for access to these resources.

Derbyshire Fire & Rescue Service (additional high volume pumps can be requested from the national allocation of 46 which is dispersed regionally) (additional normal fire appliances may be available via mutual aid from other fire and rescue services)	One high volume pump (7,000 litres/min) based at Ilkeston
	41 normal fire appliances based across the city/county
	Portable fire pumps also carried by appliances
Environment Agency	High volume pumps (HVPs) are a national EA asset that can be requested by EA areas through the mutual aid process. The EA has a contract with Stobart Group to deliver these assets nationwide, allowing us to respond rapidly and flexibly to flood events.

The following organisations can be contacted to request if any resources are available:

Derby City Council – Flood/Land Drainage Team have access to some pumps
Derbyshire Dales District Council - based at Northwood Depot, Darley Dale
Highways England – Access to 1x HVP based in North East Region (fully interoperable with FRS assets)
National Trust - Edale Estate.
North East Derbyshire District Council - based at Eckington Depot
Peak Park Ranger Service

Resources including:

Pumps and hose (trailer mounted or portable) - varying sizes.

See appendix B for contacts.

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).

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 Fire and Rescue Service National Coordination Centre (FRSNCC), London Fire Brigade 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 Fire and Rescue Service National Coordination Centre (FRSNCC) in London Fire Brigade. For validation purposes, the call to the FRSNCC must be made by a Fire and Rescue Service Control Room.

- The FRSNCC 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 FRSNCC 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 FRSNCC 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 FRSNCC 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.

- FRSNCC 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 FRSNCC 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 pre-determined 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 in advance 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 re-occupying 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.

Derbyshire Prepared

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 Highways England.
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

Lexicon

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 Derbyshire LRF Major Incident Procedures and the Derbyshire LRF Strategic and Tactical Management Guide for Major Incidents.

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

Both the Derbyshire LRF Major Incident Procedures and the Strategic and Tactical Management Guide are available on ResilienceDirect, the Major Incident Procedures are also accessible via https://www.derbyshireprepared.org.uk

Other terminology specific to this plan only

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

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 is an integrated service provided by the EA and the Met Office either via email or teleconference.

FFC	Flood Forecasting Centre	A joint unit using staff from the Met Office and EA to produce national summaries of forthcoming weather or tides which may produce flooding.
	Floodline	A dial up telephone information service operated by the EA for the public, giving recorded information on the 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.
	Flood warning area (FWA)	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, usually numbered according to probability of flooding.
LLFA	Lead Local Flood Authority	New 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.