

Organisation	Planning	Response	Recovery
<p><b>Suffolk Fire &amp; Rescue Service</b></p>	<p>See the 'all responders' section above for shared roles and responsibilities.</p>	<ul style="list-style-type: none"> <li>Rescue people trapped by fire, flood, wreckage, or debris</li> <li>Assist agencies with the removal or dispersal of critical quantities of flood water</li> <li>Manage issues associated with hazardous materials or other contaminants.</li> <li>Assist ambulance services with casualty handling and or decontamination as required.</li> <li>Coordinate search &amp; rescue operations with other agencies.</li> <li>Provision of Aerial surveillance drones for Responder situational awareness</li> </ul> <p>See the 'all responders' section above for shared roles and responsibilities.</p>	<ul style="list-style-type: none"> <li>Assist other agencies to minimise the impact on the community.</li> <li>Assist the Police with the recovery of bodies</li> <li>Assist agencies with the removal or dispersal of critical quantities of flood water.</li> <li>Provision of Aerial surveillance drones for Responder situational awareness</li> </ul> <p>See the 'all responders' section above for shared roles and responsibilities.</p>
<p><b>East of England Ambulance Service Trust (EEAST)</b></p>	<ul style="list-style-type: none"> <li>Ensure compatibility and exercise Regional and local response plans.</li> </ul> <p>See the 'all responders' section above for shared roles and responsibilities</p>	<ul style="list-style-type: none"> <li>Provide emergency medical treatment for casualties</li> <li>Transport injured people to hospitals</li> <li>Co-ordinate the support of voluntary organisations in the management and transportation of casualties</li> <li>Co-ordinate the response of the National Health Service on-site</li> <li>Carry out decontamination (in conjunction with SFRS).</li> </ul> <p>See the 'all responders' section above for shared roles and responsibilities</p>	<ul style="list-style-type: none"> <li>To maintain emergency cover throughout the East of England Ambulance Service area, and return to a state of normality at the earliest time.</li> </ul> <p>See the 'all responders' section above for shared roles and responsibilities</p>
<p><b>PHE</b></p>	<ul style="list-style-type: none"> <li>Ensure appropriate procedures are in place to provide health protection advice</li> </ul>	<ul style="list-style-type: none"> <li>Coordinate the provision of the Chair and support for STAC with Director of Public</li> </ul>	<ul style="list-style-type: none"> <li>Provide appropriate scientific and technical input into the RCG and sub</li> </ul>

Organisation	Planning	Response	Recovery
<p>cont</p>	<p>to the response</p> <ul style="list-style-type: none"> <li>Produce advice in advance to responders and the public in relation to exposure hazards from flooding.</li> </ul> <p>See the 'all responders' section above for shared roles and responsibilities.</p>	<p>Health</p> <ul style="list-style-type: none"> <li>Provide timely and appropriate health protection advice to the response</li> <li>Activate an emergency operation centre as applicable.</li> </ul> <p>See the 'all responders' section above for shared roles and responsibilities.</p>	<p>groups</p> <ul style="list-style-type: none"> <li>Provide support to NHS and Clinical Commissioning Groups in relation to the development of long term public health monitoring strategies of the long-term health effects of flooding.</li> </ul> <p>See the 'all responders' section above for shared roles and responsibilities.</p>
<p>NHS England</p>	<p>See the 'all responders' section above for shared roles and responsibilities.</p>	<p>See the 'all responders' section above for shared roles and responsibilities.</p>	<ul style="list-style-type: none"> <li>Facilitate long term health monitoring.</li> <li>Ensure the restoration of health services to the affected area(s)</li> </ul> <p>See the 'all responders' section above for shared roles and responsibilities.</p>
<p>Internal Drainage Boards</p>	<ul style="list-style-type: none"> <li>Maintain drains, pumping stations, flood defences, watercourses and sluices</li> <li>Enforce riparian owners to undertake remedial action on watercourses where necessary</li> <li>Promote capital schemes for drainage and flood defence improvement</li> <li>Provide advice on new developments to local authorities and developers</li> <li>Provide advice and support to partners</li> <li>Exercise powers under the Land Drainage Act 1991 and byelaws to ensure that activities in and alongside the drainage system do not reduce flood protection standards and unnecessarily increase flood risk</li> <li>Monitor levels and flows within designated watercourses</li> </ul>	<ul style="list-style-type: none"> <li>Where possible, support the emergency response through provision of staff, resources and local knowledge.</li> </ul> <p>See the 'all responders' section above for shared roles and responsibilities.</p>	<ul style="list-style-type: none"> <li>Assist where possible in remedial and clearance works</li> <li>Update flood records and carry out a post-flood survey.</li> </ul> <p>See the 'all responders' section above for shared roles and responsibilities.</p>

Organisation	Planning	Response	Recovery
<p>...cont</p>	<ul style="list-style-type: none"> <li>Deploy staff to remove obstructions and protect assets.</li> </ul> <p>See the 'all responders' section above for shared roles and responsibilities.</p>		
<p><b>Utilities</b></p>	<ul style="list-style-type: none"> <li>Internal contingency plans, which would be activated as required</li> <li>Clear blockages in public sewers and outfall grills</li> <li>Maintain and repair public sewers.</li> </ul> <p>See the 'all responders' section above for shared roles and responsibilities.</p>	<ul style="list-style-type: none"> <li>Close liaison between the utilities, principal emergency services, local authorities and the public will, in the event of substantial flooding, be provided through SCG.</li> <li>Emergency pumping at failed pumping stations</li> <li>Repairing burst sewage and water pumping mains</li> <li>Secure services and equipment to ensure continuity of supply</li> <li>Repair disrupted services</li> <li>Provide alternative means of supply during service disruption</li> <li>Advise partner organisations, the media and the public when disrupted services will be reinstated</li> <li>May take action to protect property flooding from public water mains or discharges from sewerage systems.</li> </ul> <p>See the 'all responders' section above for shared roles and responsibilities.</p>	<ul style="list-style-type: none"> <li>Inspect the condition of public sewers and undertake remedial action if necessary.</li> </ul> <p>See the 'all responders' section above for shared roles and responsibilities.</p>
<p><b>Met Office</b></p>	<ul style="list-style-type: none"> <li>Provide weather forecasts</li> <li>Issue Severe Weather Warnings</li> <li>Work with Flood Forecasting Centre to issue Flood Guidance Statements and</li> </ul>	<ul style="list-style-type: none"> <li>Activate the Met Office Emergency Support Service</li> <li>Provide guidance and support to emergency responders.</li> </ul>	<p>See the 'all responders' section above for shared roles and responsibilities.</p>

Organisation	Planning	Response	Recovery
	<p>maintaining Hazard Manager. See the 'all responders' section above for shared roles and responsibilities.</p>	<p>See the 'all responders' section above for shared roles and responsibilities.</p>	
<p><b>Maritime &amp; Coastguard Agency</b></p>	<p>See the 'all responders' section above for shared roles and responsibilities.</p>	<ul style="list-style-type: none"> <li>• Initiate and coordinate civil maritime search and rescue (includes mobilising, organising and dispatching resources to assist people in distress at sea, or in danger on cliffs or shoreline, or in certain inland areas)</li> <li>• Coordinate response to pollution at sea and assist local authorities with shoreline clean up</li> <li>• Support emergency service and local authorities during emergencies, e.g. flooding.</li> </ul> <p>See the 'all responders' section above for shared roles and responsibilities.</p>	<p>See the 'all responders' section above for shared roles and responsibilities.</p>
<p><b>MHCLG</b></p>	<ul style="list-style-type: none"> <li>• Provide support to SRF planning arrangements</li> <li>• Cascade information and policy from national level</li> <li>• Address any mutual aid requests not covered elsewhere on a national and cross border level and arrangements for ResCG.</li> </ul> <p>See the 'all responders' section above for shared roles and responsibilities.</p>	<ul style="list-style-type: none"> <li>• Establish and facilitate the Multi-SCG Response Co-ordinating Group (ResCG), if appropriate</li> <li>• Provide Government Liaison Office to the SCG</li> <li>• Coordinate submission of SRF Situation Reports to central government, and receipt of the Common Recognised Information Picture (CRIP).</li> </ul> <p>See the 'all responders' section above for shared roles and responsibilities.</p>	<ul style="list-style-type: none"> <li>• Support the recovery phase by linking with national and regional agencies</li> <li>• Co-ordinate and provide advice on VIP visits</li> <li>• Monitor the recovery process and provide update reports to central government.</li> </ul> <p>See the 'all responders' section above for shared roles and responsibilities.</p>

## **Annex H Lowestoft Temporary Flood Barrier (LTFB)**

### **Overview**

East Suffolk District Council (ESDC) has 1400m of temporary tidal defences to reduce the risk of flooding to the centre of Lowestoft in the event of a tidal surge, until the permanent flood defence capital project is completed (by 2023).

The decision to construct the LTFB is made by ESDC in conjunction with the SRF, using information provided by the Environment Agency (EA) either during a Flood Advisory Service or Suffolk Resilience Forum (SRF) teleconference.

The LTFB is manufactured by GeoDesign, stored on each of the four sites and constructed using manpower from Waveney Norse and Water Management Alliance (WMA), both ESDC strategic partners.

The alignment of the LTFB is along Commercial Road (two locations), Waveney Road, Kirkley Ham and Belvedere Road (see Annex A). The sites are predominantly on private land, including ABP Lowestoft and access has been pre-arranged with the landowners.

The complete barrier requires a minimum of 30 hours to construct, which takes account of inclement weather, fatigue and darkness. For safety, the LTFB should be completed 6 hours prior to the estimated high water from the surge. This gives a total time of 36 hours (see Timings)

### **Incident Management Structure**

Coastal Partnership East (CPE), part of ESDC, provide the overall management of the LTFB and conduct all liaison with strategic partners and private landowners. During periods of increased flood risk, a member of CPE is on duty and available via the JEPD Duty Officer to provide advice to the SRF or ESDC and dial into any teleconference.

Operational resource to construct, monitor and maintain security of the barrier is provided by the WMA and Waveney Norse.

The Traffic Management Organisation (TMO) provide predetermined temporary road closures for the footpath on Kirkely Ham and for pumping water during maintenance operations.

### **Deployment Decisions**

The Environment Agency (EA) model the various factors that create a tidal surge through their Flood Forecasting Centre (FFC) and provide advice, including the predicted high water height, twice daily. The prediction starts with 'low confidence' but probability and accuracy improves, with a 'high confidence' deterministic forecast approximately 36hrs prior to the tidal surge.

The trigger for the deployment of the temporary flood barriers is a predicated high water height of >2.3m AODN (the lowest point of the quay on the south side of Lake Lothing).

If the predicted high water heights is <2.8m AODN (quay height for the north side of Lake Lothing) then the decision may be made not to construct the barriers in Commercial Road and Waveney Road.

The decision to deploy the LTFB and start construction is made by ESDC in conjunction with the SRF during either an EA Flood Advisory Service or SRF teleconference. The EA will provide the following information about the anticipated highest water height at Lowestoft which will guide decision making:

Serial	Data	Value
1	Date of high water	xx Month 20xx
2	Time(s) of high water	xxxx hrs
3	Astronomical at high water	m AODN
4	Predicated surge at high water	m
5	Forecast wind strength and direction	XXX Bft
6	Forecaster adjustment to high water	m
7	Final high water predication, including all meteorological data	m AODN

Any LTFB deployment decisions, the implication for SRF partners and suitable communications messages made on the EA FAS teleconference should be confirmed by the SRF SCG to ensure that the appropriate SRF co-ordination measures are in place.

### Timings

A suggested deployment timeline is as follows (T is the predicted time of highest water height):

Timeframe	Action
Up to 5 days ahead	Informal discussions with JEPU/EA/ESDC about emerging issues. Initial contact with landowners and strategic partners. CPE confirm duty roster with JEPU. Enabling resources (transport and handling equipment) hired (if weekend or bank holiday)
T - 48 hours	Construction resources placed on standby. Traffic management resource placed on standby. Access to land confirmed and ABP Lowestoft approve access.
T - 36 hours	Last safe moment for a decision to construct the complete LTFB (both south and north sides). Barrier deployment confirmed with CPE. Final notification to landowners. ESDC Emergency Control Centre (ECC) set-up
T - 24 hours	Last safe moment for a decision to construct the LTFB for the most vulnerable areas (Belvedere and Waveney roads and Kirkley Ham
T - 6 hours	Barrier fully operational, traffic management in place.

### Reporting

CPE will provide regular updates to the Emergency Control Centre (ECC) for the ESDC representatives at both the TCG and SCG.

### Media

A LTFB media communication strategy has been produce by ESDC for use by *Communicate Suffolk* if required.

### Monitoring and Security

Once the decision has been made to deploy the LTFB the strategic partners maintain small monitoring and security teams to prevent theft / vandalism and monitor barrier performance. The teams are able to pump any minor water seepage into the storm drains that enter Lake Lothing. When the surge water reaches the barriers a decision will be made by CPE to withdraw these teams for their own safety.

## Recovery

The following timescale is based on an estimate of the time to dismantle, clean and store the equipment. The decision to dismantle the LTFB will be made by ESDC in conjunction with the SRF, once the Environment Agency confirm that the threat from coastal flooding has receded.

Timing	Action
48 hours	Initial dismantling, focusing on priority areas/frontages to allow continuation of traffic and working practices.
Up to 10 days	Cleaning and storage or disposal of contaminated materials

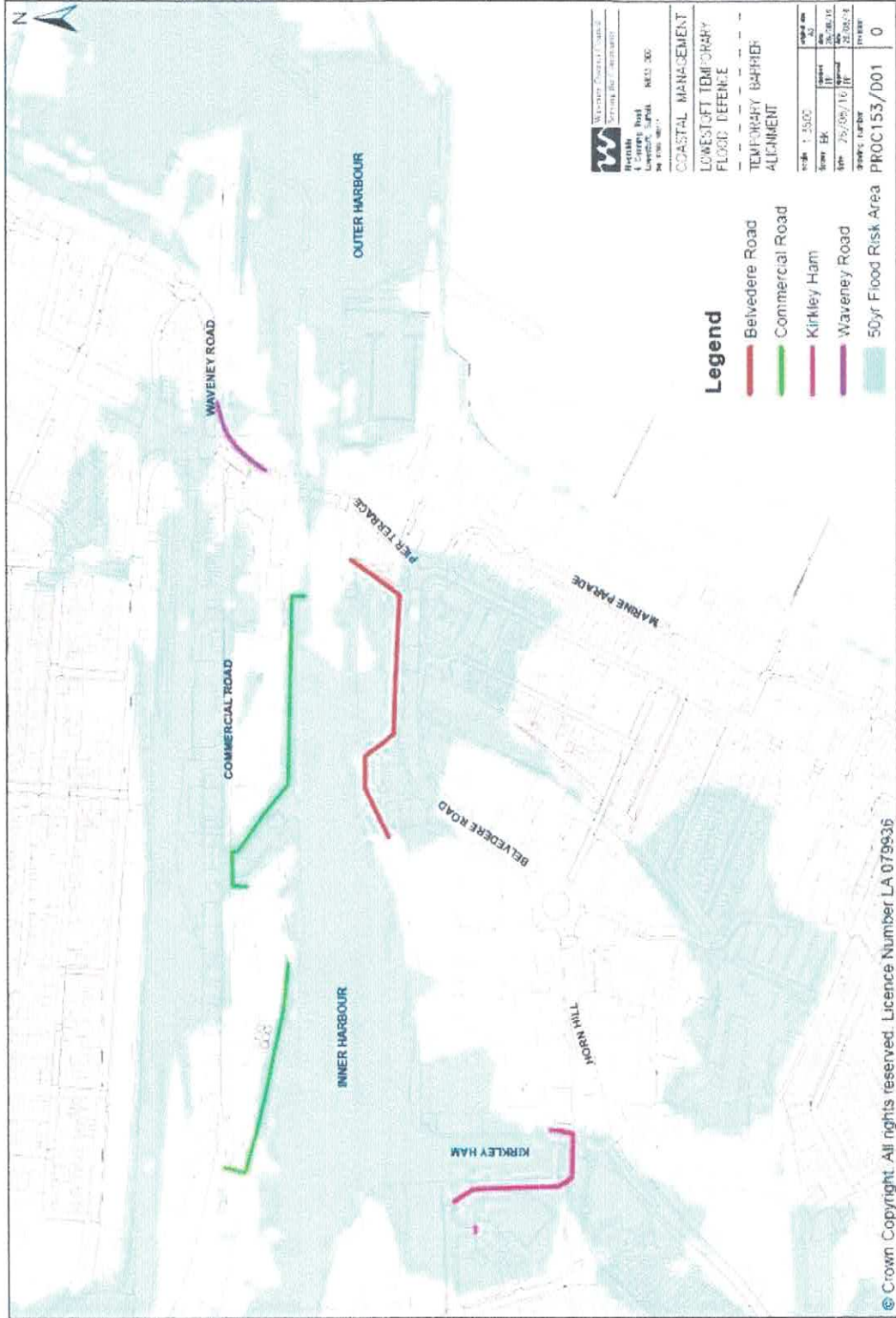
## Military Involvement

The military could be considered to assist with the construction of the LTFB. The military has experience of the GeoDesign temporary flood barrier and developed a set of Standard Operating Procedures for its construction. Any request for military assistance will need to consider the time for travel, briefing and some familiarisation training provided by Norse/WMA.

Military involvement in the dismantling and recovery of the LTFB is not recommended due to the requirement to decontaminate, dry, reconcile and correctly store the barriers for further use.

Appendix 1: LTFB Alignment.

# Appendix 1: LTFB Alignment





## Annex I Flood Risk Summary Sheets by District

(Information on flood warning uptake correct as of April 2017)

<b>District: Babergh</b>	
<p>Fluvial flood risk in Babergh exists along the River Stour, which forms the southern Boundary, and its major tributaries, the rivers Box and Brett. The tributaries are susceptible to flash flooding as they react quickly to thunderstorms. Flooding is possible in the towns of Hadleigh and Sudbury and in the villages of Stratford St Mary, Nayland, Bures, and Long Melford. On the tributaries flooding is a risk in Layham, Monks Eleigh and Lavenham on the Brett. On the River Box, Boxford is at risk. Flooding is also a risk at Glemsford on the River Glem. The tidal Rivers Orwell and Stour are also in this area. <b>Refer to the Suffolk Local Flood Warning Plan for more information on these areas.</b></p>	
<b>No. of properties at risk</b>	<b>Key vulnerable infrastructure</b>
1010	2 Health Care Facilities 1 Sub station 3 Water Services Pumping Stations Babergh District Council Offices
<b>No. of properties registered onto Flood Warning Service</b>	<b>Lead Time</b>
678	2 hours
<b>Flooding History</b>	
<p>Significant flooding in September 1968 along the Stour valley and its tributaries. Areas flooded included Stratford St Mary, Bures, Nayland, Ballingdon and Long Melford.</p> <p>Flooding also took place in 1981, 1987(twice) and 2001. In these events flooding was confined to particularly isolated and vulnerable properties along the rivers Stour, Box, Brett and Chad Brook.</p> <p>In December 2013, 1 property in Pin Mill flooded and Foxes Marina was affected by the tidal surge.</p>	
<b>Flood Warning Level</b>	
Flood Alert	Fluvial: <ul style="list-style-type: none"> <li>• 054WAFSF5</li> <li>• 054WAFSF4FG</li> <li>• 051WAFEF1</li> <li>• 051WAFEF3</li> </ul> Tidal: <ul style="list-style-type: none"> <li>• 054WACDV4B</li> </ul>
Flood Warning & Severe Flood Warning	Fluvial: <ul style="list-style-type: none"> <li>• 051FWFEF2</li> <li>• 051FWFEF3a</li> <li>• 051FWFEF3b</li> <li>• 054FWFSF4G</li> <li>• 054FWFSF5A</li> <li>• 054FWFSF5B</li> </ul> Tidal: <ul style="list-style-type: none"> <li>• 054FWCDV4B2</li> <li>• 054FWCDV4B3b</li> <li>• 054FWCDV4B5</li> <li>• 054FWCDV4B8</li> </ul>

<b>District: Forest Heath</b>	
The rivers Kennett, Lark and Thet flow through the district with parts of the towns of Mildenhall and Brandon at risk of flooding. <b>Refer to the Suffolk Local Flood Warning Plan for more information on these areas.</b>	
<b>No. of properties at risk</b>	<b>Key vulnerable infrastructure</b>
326	1 Primary School 1 Substation 1 water treatment works 2 Health Care Facilities
<b>No. of properties registered onto Flood Warning Service</b>	<b>Lead Time</b>
305	2 hours
<b>Flooding History</b>	
In September 1968 35 properties in Dalham and 41 properties in Moulton flooded from the River Kennett.	
<b>Flood Warning Level</b>	
Flood Alert	• 052WAFLTH
<b>Flood Warning Level</b>	
Flood Warning & Severe Flood Warning	• 052FWFKE1DL • 052FWFFLA1BL • 052FWFFLA2FL

<b>Borough: Ipswich</b>	
<p>The risk of flooding to Ipswich is most likely in a situation when high river flows are combined with a high tidal surge. Defences have been constructed to protect against events of the magnitude of 1939, 1947 and 1953. The Ipswich Tidal Barrier is due to be completed and commissioned throughout 2018, which will further improve protection to Ipswich. Nevertheless, flooding purely from the River Gipping is possible in an extreme event and this is most likely to affect the area around the Boss Hall Industrial estate and the area between the River and Yarmouth Road.</p> <p>Flooding in a combined event is likely to prove much more extensive (see coastal flooding risk assessment). <b>Refer to the Suffolk Local Flood Warning Plan for more information on these areas.</b></p>	
<b>No. of properties at risk</b>	<b>Key vulnerable infrastructure</b>
3,461	Cliff Quay sewage treatments works Handford Hall Primary school Fire station, Princes Street Suffolk County Council HQ Ipswich Borough Council HQ 1 Sub-station Ipswich Buses main depot. First Buses Garage 1 Health Care Facility Ipswich Crown Court.
<b>No. of properties registered onto Flood Warning Service</b>	<b>Lead Time</b>
2,130	2 hours
<b>Flooding History</b>	
<p>In 2013, 1 property was flooded in Ipswich, caused the December 5<sup>th</sup> tidal surge.</p>	
<b>Flood Warning Level</b>	
Flood Alert	Fluvial: <ul style="list-style-type: none"> <li>• 054WAFSF4FG</li> </ul> Tidal: <ul style="list-style-type: none"> <li>• 054FWCDV4B</li> </ul>
<b>Flood Warning Level</b>	
Flood Warning & Severe Flood Warning	Fluvial: <ul style="list-style-type: none"> <li>• 054FWFSF4G</li> </ul> Tidal: <ul style="list-style-type: none"> <li>• 054FWCDV4B2</li> <li>• 054FWCDV4B3a</li> <li>• 054FWCDV4B3b</li> <li>• 054FWCDV4B4</li> </ul>

**District: Mid Suffolk**

The area covers 4 significant river catchments. The Northern boundary of the River Waveney has a large flood plain, but only particularly isolated properties have been known to flood – although an unusually large event may reach the lower parts of Mendham or Oakley. The River Dove flows through Brockford Street, Eye and Hoxne but, again, there are relatively few properties in the flood plain. No flood warning service is currently available for the River Dove.

Debenham is vulnerable to flash flooding of the headwaters of the River Deben and 33 properties were flooded in 1993. Flooding here can be very quick.

In the Gipping Valley, properties along the river are vulnerable in significant flood events. Regents Street has been flooded on more than one occasion and various Mills in Stowmarket, Needham Market and Great Blakenham have had documented floods.

Stowmarket is defended by flood storage reservoirs upstream on both the River Gipping and the River Rat.

<b>No. of properties at risk</b>	<b>Key vulnerable infrastructure</b>
906	1 COMAH site 1 Police Station 3 Fire Stations 1 Health Care Facility 3 Care Homes 3 Education establishments 3 Sewerage treatment works 1 Sub station
<b>No. of properties registered onto Flood Warning Service</b>	<b>Lead Time</b>
591	2 hours
<b>Flooding History</b>	
<p>There are documented records of 4 floods of historical significance.</p> <p>1987 – Heavy rainfall in August caused flooding in the Gipping Valley at Stowmarket and Needham Market. At least 10 properties were flooded.</p> <p>1988 – Properties flooded in Regent Street, Stowmarket.</p> <p>1993 – Heavy rainfall caused flooding of vulnerable properties in Stowmarket, Combs Ford, Great Finborough and Needham Market. Rainfall was heavier at Debenham where 33 properties were flooded.</p> <p>2000 – Heavy rainfall flooded 6 properties in Stowmarket and Needham Market.</p> <p>2012 – Heavy rainfall flooded 5 properties in Needham Market</p>	
<b>Flood Warning Level</b>	
Flood Alert	Fluvial: <ul style="list-style-type: none"> <li>• 054WAFSF1</li> <li>• 054WAFSF4DE</li> <li>• 054WAFSF4FG</li> <li>• 054WAFSF4AC</li> </ul>
Flood Warning & Severe Flood Warning	Fluvial: <ul style="list-style-type: none"> <li>• 054FWFSF4D</li> <li>• 054FWFSF4E</li> </ul>

	<ul style="list-style-type: none"><li>• 054FWFSF4F</li><li>• 054FWFSF4G</li><li>• 054FWFSF1A</li><li>• 054FWFSF4A</li></ul>
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**Borough: St Edmundsbury**

The catchment of the River Stour forms the southern part of the local authority area. This is the upper part of the catchment and reacts quickly to heavy rainfall or prolonged periods of wet weather. Cavendish, Clare and Stoke by Clare are all at risk of flooding. This can affect both properties and the A1092 road.

Haverhill is located alongside the Stour Brook and 170 properties flooded in 1968. Since then, a flood storage reservoir has been constructed upstream of the town and this reduced the flooding experienced in 2001.

Flood alleviation scheme in Bury St. Edmunds on the River Lark in early 1980's

<b>No. of properties at risk</b>	<b>Key vulnerable infrastructure</b>
220	Haverhill Police station Haverhill Fire station 1 Education establishment 1 Care home 5 Sewerage treatment works 1 Substation 3 Bus Depots
<b>No. of properties registered onto Flood Warning Service</b>	<b>Lead Time</b>
294	2 hours
<b>Flooding History</b>	
The southern part of the area forms the catchment of the river Stour and its principal tributaries. The largest historical flood on this river was in 1968 when over 220 properties were flooded, 170 of them in Haverhill. Kedington, Clare and Cavendish were also affected. Further flooding took place in 1987 and 2001 when properties were flooded in Kedington, Clare and Cavendish.	
<b>Flood Warning Level</b>	
Flood Alert	Fluvial: • 051WAFEF1
Flood Warning & Severe Flood Warning	Fluvial: • 051FWFEF1a • 051FWFEF2

**District: Suffolk Coastal District Council**

Much of Suffolk Coastal is vulnerable to coastal flooding should defences be overwhelmed or breached. Significant flood defences exist at Felixstowe and Woodbridge. Felixstowe Ferry, Waldringfield, Shingle Street, Orford, Aldeburgh, Thorpeness, Dunwich and Walberswick are all vulnerable to varying degrees of flooding from the sea. Properties are also at risk along the Estuaries of the Rivers Orwell, Deben, Ore, Alde and Blyth. Actual properties at risk are few, but significant amounts of marsh reclaimed for agricultural use could be inundated in a major flood. Major infrastructure is only at risk during a major coastal flood exceeding 1953.

No. of properties at risk	Key vulnerable infrastructure
3,340	Sizewell A & B could be cut off by flood waters. 2 Railway stations. 2 Ambulance stations 1 Fire station 4 Care homes 7 Education establishments 4 Sub stations 1 Health care establishment 14 Treatment works International Port HMP Hollesley Bay
No. of properties registered onto Flood Warning Service	Lead Time
2,731	2 hours
Flooding History	
<p>The major incident of coastal flooding occurred in 1953. Most coastal settlements were affected. In Felixstowe, 48 people lost their lives and over 1000 were made homeless. Since 1953 coastal flooding has been on a much lower scale.</p> <p>In 1978, 40 properties were flooded in Felixstowe and 25 in Aldeburgh. High tides in 1993 flooded few properties.</p> <p>December 2013 tidal surge caused 62 properties to flood – 24 in Snape, 2 in Orford, 14 in Waldringfield, 13 in Felixstowe Ferry, 7 in Woodbridge, 1 in Aldeburgh and 1 in Levington.</p>	
Flood Warning Level	
Flood Alert	Fluvial: <ul style="list-style-type: none"> <li>• 054WAFSF2</li> <li>• 054WAFSF3a</li> <li>• 054WAFSF3BC</li> <li>• 054WAFSF4AC</li> </ul> Tidal: <ul style="list-style-type: none"> <li>• 054WACDV3B</li> <li>• 054WACDV4A</li> <li>• 054WACDV4B</li> </ul>
Flood Warning & Severe Flood Warning	Fluvial: <ul style="list-style-type: none"> <li>• 054FWFSF2C</li> </ul>

	<ul style="list-style-type: none"><li>• 054FWFSF3A</li><li>• 054FWFSF3B</li><li>• 054FWFSF3C</li><li>• 054FWFSF4A</li><li>• 054FWFSF4B</li><li>• 054FWFSF4C</li></ul> <p>Tidal:</p> <ul style="list-style-type: none"><li>• 054FWCDV3B7</li><li>• 054FWCDV3B8</li><li>• 054FWCDV3B9</li><li>• 054FWCDV3B10</li><li>• 054FWCDV3B11</li><li>• 054FWCDV3B12</li><li>• 054FWCDV3B13</li><li>• 054FWCDV4A1</li><li>• 054FWCDV4A2</li><li>• 054FWCDV4A3</li><li>• 054FWCDV4A4</li><li>• 054FWCDV4B1</li><li>• 054FWCDV4B2</li></ul>
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<b>District: Waveney</b>	
<p>Waveney is vulnerable to coastal flooding both along the coastline and in the tidal parts of the River Waveney, which extend upstream as far as Ellingham.</p> <p>Southwold could become effectively an island in a major inundation and the A12 is vulnerable in a major event both at Kessingland and the harbour area of Lowestoft. Significant tidal flooding would also affect the villages of Haddiscoe, St Olaves and the river crossings in the Waveney valley, and significant disruption to Beccles.</p>	
<b>No. of properties at risk</b>	<b>Critical Infrastructure</b>
3,093	2 Railway stations 1 Police station 3 Fire stations 1 Health care facility 2 Education establishments 11 Treatment works 2 Bus garages
<b>No. of properties registered onto Flood Warning Service</b>	<b>Lead Time</b>
2,023	2 hours
<b>Flooding History</b>	
<p>The most significant flood was the 1953 event; 5 people lost their lives in Southwold; many properties were flooded in Lowestoft and along the coast.</p> <p>The last significant flood was in 1976, when properties were flooded in Oulton Broad.</p> <p>November 2007 tidal surge affected properties in Beccles.</p> <p>In 2013, 158 properties were flooded in Lowestoft and 9 in Southwold, during the December 5<sup>th</sup> tidal surge.</p> <p>July 2015 – Heavy rainfall cause surface water flooding around Kirkley Stream.</p>	
<b>Flood Warning Level</b>	
Flood Alert	Fluvial: <ul style="list-style-type: none"> <li>• 054WAFSF1</li> <li>• 054WAFSF2</li> </ul> Tidal: <ul style="list-style-type: none"> <li>• 054WATBT3</li> <li>• 054WACDV3B</li> <li>• 054WACDV3C</li> </ul>
Flood Warning & Severe Flood Warning	Fluvial: <ul style="list-style-type: none"> <li>• 054FWFSF1A</li> <li>• 054FWFSF1B</li> <li>• 054FWFSF2A</li> </ul> Tidal: <ul style="list-style-type: none"> <li>• 054FWTBT3a</li> <li>• 054FWTBT3b</li> </ul>

	<ul style="list-style-type: none"><li>• 054FWCDV3B1</li><li>• 054FWCDV3B2</li><li>• 054FWCDV3B3</li><li>• 054FWCDV3B4</li><li>• 054FWCDV3B5</li><li>• 054FWCDV3B6</li><li>• 054FWCDV3B8</li></ul>
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## Annex J Specimen Evacuation Notice 2

See next page

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<sup>2</sup> Based on a specimen evacuation notice produced by Norfolk County Council and Norfolk Constabulary

BACK PAGE

FRONT PAGE

**Radio Stations**

BBC Radio Suffolk

Town 102

The Beach

Heart FM

**Evacuation Notice for .....**

As a result of the risk to life from severe coastal flooding we advise that you evacuate your property.

You should evacuate by..... on .....

Your nearest Rest Centre will open at.....and is located at.....

Transport will be available at .....from .....

You will be advised when it is safe to return by messages on local radio and at Rest Centres.

If you were out when police officers / flood wardens delivered this leaflet, contact the following number ..... to obtain further information and notify the Emergency Services that you have returned to your address/place of work.

**Web sites**

[www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)

@EnvAgency

[www.metoffice.gov.uk](http://www.metoffice.gov.uk)

[www.bbc.co.uk/weather](http://www.bbc.co.uk/weather)

## INSIDE PAGES

If evacuation becomes necessary

- Stay calm and do not panic.
- Police officers and / or other officials will try to visit all properties at risk to advise on the requirement to evacuate.
- If road conditions permit, move vehicles to unaffected areas for example higher ground; ask friends / family if you can share their parking facilities.
- If you require transport to evacuate, the location of your evacuation point is included on the front page of this leaflet or you will be informed by an officer knocking on your door.
- Try to check that any elderly / vulnerable family members or neighbours know about the evacuation.
- Try to inform family members / friends as to where you are evacuating.
- Listen to the advice of the authorities and follow any instructions to leave the property.

- Take any special foods and medicines;
- switch off gas and electricity.
- Parents take toys or materials to occupy young children:
- If possible, move electrical equipment and furniture upstairs.
- Ensure that any precious or important documents (such as photographs, insurance documents, etc.) are placed in a safe location.
- Any furniture that you cannot move upstairs, try to raise well off the floor.
- Do not forget to lock all doors and windows.
- Attempt to block doorways and air bricks.
- Avoid walking and driving through floodwater, there could be hidden hazards.

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## Glossary

ABI	Association of British Insurers
AIR	Area Incident Room (Environment Agency)
BDC	Babergh District Council
CCS	Civil Contingency Secretariat
CPE	Coastal Partnership East
MHCLG (RED)	Ministry of Housing, Communities and Local Government (Resilience and Emergencies Division)
DEFRA	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
EA	Environment Agency
EDW	Extended Direct Warnings
FAS	Flood Advisory Service (Environment Agency)
FCP	Forward Control Point
FGS	Flood Guidance Statement
FHDC	Forest Heath District Council
FWD	Floodline Warnings Direct
PHE	Public Health England
IBC	Ipswich Borough Council
JEPU	Joint Emergency Planning Unit
LRF	Local Resilience Forum
LTFB	Lowestoft Temporary Flood Barrier
MACA	Military Aid to the Civil Authorities
MASHA	Multi-agency Strategic Holding Area
MCA	Maritime & Coastguard Agency
MCC	Media & Communications Cell
RCG	Recovery Coordination Group
RVP	Rendezvous Point
RWG	Recovery Working Group
SCC	Suffolk County Council
SEBC	St Edmundsbury Borough Council
SCDC	Suffolk Coastal District Council
SCG	Strategic Coordination Group
SVOG	Suffolk Voluntary Organisations Group
STAC	Scientific and Technical Advisory Cell
TCG	Tactical Coordination Group
STFS	Storm Tide Forecasting Service
WDC	Waveney District Council



# GUIDE TO EVACUATION AND SHELTER IN SUFFOLK

<b>Author:</b>	Suffolk Constabulary on behalf of SRF
<b>Date of Implementation:</b>	July 2019
<b>Review</b>	July 2022
<b>Version</b>	Issue 4

## **GENERAL DATA PROTECTION REGULATIONS 2016/679 AND DATA PROTECTION ACT 2018**

This plan does not include personal, sensitive or special category data as defined under the General Data Protection Regulations. It does include data/information relevant to achieve planning arrangements and identifies how more specific personal data will be used during any emergency.

## **FREEDOM OF INFORMATION ACT 2000**

This document will be made publicly available through the SRF website. Where content has been redacted under the freedom of Information Act 2000 (FOI) in the publicly available version, the paragraph number will be highlighted to show there has been a redaction and the relevant section of FOI referenced.

## **ENVIRONMENTAL INFORMATION REGULATIONS 2004 (IF REQUIRED)**

This plan presumes disclosure of all environmental information, under Environment Information Regulations. Where exemptions are claimed under Environment Information Regulation 12 (5)a, this will only be where one of the responder agencies has judged that the information may adversely affect either international relations, defence, national security or public safety. Where such content has been identified, the paragraph number will be highlighted and the paragraph text removed from public versions of the plan.

## **REVIEW**

This plan will be reviewed by Suffolk Constabulary on behalf of the Suffolk Resilience Forum at least every 3 years. Earlier reviews will take place if there is a change in working practices, legislation or new information from lessons identified following exercises or incidents.



**DISTRIBUTION**

Suffolk Constabulary  
Suffolk Fire and Rescue Service  
East of England Ambulance Service NHS Trust  
NHS England and NHS Improvements – East  
Ipswich and East Clinical Commissioning Group  
West Suffolk Clinical Commissioning Group  
Public Health England – East of England PH Team  
Environment Agency  
Suffolk Local Authorities (via Joint Emergency Planning Unit)

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**AMENDMENT RECORD**

Amd no.	Date	Amended by	Summary

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## 1. INTRODUCTION

- 1.1 The aim of this supporting document (as defined in the **SRF Generic Emergency Response Plan**) is to provide the responder agencies that make up the Suffolk Resilience Forum (SRF), with a strategic framework and tactical guidelines to support the evacuation of an area or areas within Suffolk.
- 1.2 This framework is intended to enhance and complement existing SRF emergency plans and procedures and to provide the overarching document from which partner agencies may develop their own supporting arrangements.
- 1.3 In situations where there is no immediate threat to life, but an evacuation is considered necessary, it will be possible to engage in detailed planning for the evacuation, giving due consideration to the identification of vulnerable persons, specific requirements for their movement and reception.
- 1.4 Conversely, where there is an immediate threat to life, it may not be possible to undertake detailed planning and the decision to evacuate and the evacuation process may need to be conducted in a dynamic fashion.
- 1.5 An evacuation is not a stand-alone incident. It will only occur because something else has happened, a consequence of the effects of a contributing event. The nature of which will define the parameters of the evacuation (when, where, the extent, duration etc)
- 1.6 Specific, Town Centre plans have been developed for Bury St Edmunds (**ANNEX A**), Lowestoft (**ANNEX B**) and Ipswich (**ANNEX C**).

## 2. AIM

To provide guidance to the Strategic Coordinating Group to facilitate them making and informed decision on whether to evacuate and or shelter, or not and provide information to the Tactical Coordinating Group for the planning and implementation of an evacuation.

## 3. OBJECTIVES

- 3.1 To provide a process to enable the decision to evacuate or shelter
- 3.2 To identify considerations to support the shelter decision
- 3.3 To enable participating agencies to respond effectively to the evacuation element of an incident response.

**4. RISK**

- 4.1 The [Suffolk Community Risk Register](#) identifies locations or incidents that may require consideration of an evacuation.
- 4.2 The most densely populated area identified, is Sizewell Nuclear Power Station. See **SRF Off site Sizewell Plan** for full details.
- 4.3 An East Coast Flood event would prove challenging although not in such large numbers. This is due to the geographical spread along the coastline of Suffolk and the urban and rural nature of the county in an evacuation of this type. See **SRF Flood Plan**.
- 4.4 These would be resource intensive and a requirement for Mutual aid will need to be considered. See **APPENDIX B**
- 4.5 Particular implications with regard to Counter Terrorism (CT) incidents will need to be considered. See **11 LEGAL**.
- 4.6 Below are the localised parameters for evacuation in Suffolk based on the Community Risk Register impact figures

Definition	Decision to trigger taken by	Resources likely to be required for this magnitude	*Likely magnitude of people affected (based on =% of Suffolk to national population)	Example
Small-scale/local evacuation	Incident controller or Bronze/Silver Commanders	Local responders	Less than 10 people evacuated from residential properties	one or two residential streets
Medium-scale evacuation	Multi-agency Strategic or Tactical Coordinating Group	Local responders possibly with some regional/national support	10 to 25 people from residential properties	Can be managed as day to day business
Large-scale evacuation	Multi-agency Strategic Coordinating Group	Local responders with regional/national support	25 to 100	Multi-agency evacuation cell to be considered
Mass (or wide area) evacuation	Strategic Coordinating Group up to national	Local, regional, national	100 to 1000 +	Multi-agency evacuation cell to be instigated

\*NB: the figures in this column will be reviewed in line with the 2019 NSRA

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## 5. ROLES AND RESPONSIBILITIES

The generic roles and responsibilities of Category 1 and 2 responders are detailed in the **SRF Generic Emergency Response Plan**. The following roles and responsibilities are those more specifically envisaged in Evacuation.

### 5.1 Police

- Recommending evacuation either on advice from a specialist agency (EA, Met Office, Fire Service, Coastguard etc) and in consultation with partner agencies or in circumstances where it is required based on intelligence received
- Coordinating evacuation activity
- Developing crime prevention strategy

### 5.2 Fire and Rescue Service

- Recommending evacuation
- Search and rescue
- Decontamination of people
- Providing pumps and rescue in flood incidents

### 5.3 East of England Ambulance Service Trust

- Providing medical assistance / transportation for the vulnerable with NHS and Local Authorities (including rest centres)
- Hazard Area Response

### 5.4 Maritime and Coastguard Agency

- Providing support/resources for river and coastal evacuations
- Search and rescue at sea/ some inland waters
- Evacuating seafarers and passengers from vessels/oil and gas facilities

### 5.5 Local Authorities

- Provision of rest centres
- Transport to rest centres
- Welfare support at rest centres
- Long term welfare support
- Providing roadblocks/signage (trunk roads)
- Coordination of Community Emergency Planning Groups (CEPG)

### 5.6 Clinical Commissioning Groups

- Ensure the provision of healthcare for evacuated persons, where necessary
- In cooperation with the relevant local authority/ies identify vulnerable persons
- In cooperation with the relevant local authority/ies making suitable provision for the reception of medically vulnerable persons/groups, where appropriate
- Providing signposting to psycho-social support for persons evacuated
- Oversee planning for the evacuation of hospitals where required.

5.7 Environment Agency  
Issuing flood warnings, recommending evacuation

5.8 Voluntary and Community Sectors  
Establishing links with responders to provide support

**6. TYPES OF EVACUATION**

6.1 For the purposes of planning, evacuations may be considered to be one of two generic types:

6.2 Immediate Evacuation – resulting from a hazard impact that gives little or no warning, forces immediate actions allowing limited preparation time.

Pre-warned Evacuation – resulting from an event that provides adequate warning and does not necessarily limit preparation time. In some circumstances a phased evacuation may be considered the best option

6.3 Consider the type of evacuation to be undertaken **APPENDIX B** provides a checklist that will be used when considering evacuation.

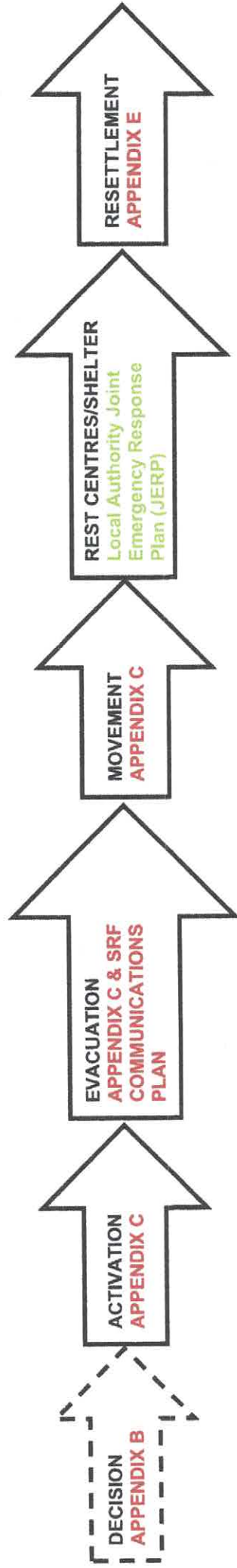
<b>Dispersal or Self Evacuation</b>	<b>Semi Managed Evacuation</b>	<b>Managed Evacuation</b>	<b>Stay and Shelter</b>
In some instances, such as an evacuation of a shopping centre, the best and most efficient method of evacuation may be to ask people to leave the building by a safe route and return home via the method of transport in which they arrived. NB. The consequences of dispersal or self-evacuation may be a loss of witnesses/evidence; this may have to be weighed against the disruption and cost of a 'managed' evacuation.	Encourage as many people as possible to self-evacuate and manage the process for those vulnerable groups that will need assistance.  For the identification of vulnerable groups refer to the <b>SRF Generic Emergency Response Plan</b> and the <b>SRF Vulnerable People Data Sharing guidance</b>	All evacuees will be asked to leave on the specified transport and to report to designated muster points or rest centres	There are other circumstances where evacuation may not be suitable.  Advice will be given following consultation between the emergency services/responders. – See <b>APPENDIX B</b>

**7. CONSIDERATION OF EVACUATION/SHELTER – DECISION MAKING**

- 7.1 Evacuation is always the last resort in the response to an emergency situation
- 7.2 Current Evacuation estimated planning assumptions are annotated at **APPENDIX A**
- 7.3 The overriding criteria for determining whether evacuation should be carried out is that, following a multi-agency risk assessment, if the threat to life of remaining in situ is assessed to be greater than the risk of evacuation. See **APPENDIX B** for more detailed information.
- 7.4 Evacuations should not be undertaken lightly, they are difficult to organise and carry through effectively.
- 7.5 Organisations responding to an event should consider whether there are other options, such as sheltering in situ with relevant advice. Refer to **APPENDIX B**. Evacuation can result in considerable stress to evacuees, risk of accidents occurring during the process, disruption to personal and work routines and a loss of business and revenue.
- 7.6 It should also be noted that the immediate evacuation of some premises may generate a greater risk of harm due to the manufacturing processes, or activities which are conducted there, e.g. hospitals, nuclear power stations, COMAH sites etc.
- 7.7 An evacuation response is divided into five functional areas, see Figure 1 below:



FIGURE 1 – FUNCTIONAL AREAS OF EVACUATION RESPONSE



## 8. EVACUATION MANAGEMENT- TACTICAL COORDINATING GROUP (TCG)

- 8.1 A multiagency evacuation cell should be established at the Tactical Coordination Centre to manage this process. This cell will be tasked by and report into the Tactical Coordinating Group (TCG)
- 8.2 Plans should be scalable and flexible to ensure that they can meet requirements in the event that an incident escalates beyond early expectations. See **APPENDIX C**
- 8.3 All decisions and planning should consider the Joint Decision Making Model (JDM). See **APPENDIX H**

## 9. ACTIVATION

- 9.1 Activation can be considered at various levels, this is indicated in the table at 4.6 above.
- 9.2 Existing command, control and coordination arrangements will be undertaken in line with the **SRF Generic Emergency Response Plan**. A multi-agency evacuation cell should be established at the TCG. See **APPENDIX C**

## 10. SECURITY OF EVACUATED PREMISES

- 10.1 It is important that evacuees can be confident that their premises are secure from criminality whilst unoccupied.
- 10.2 In the initial stages, and dependent on a risk assessment relating to officer safety, this will probably be provided by the Police. However it is imperative that these resources can be released as soon as possible. The Evacuation Cell should seek alternative provision of this function such as suitably accredited security services.

## 11. LEGAL

- 11.1 Generally speaking there are no statutory powers to enforce a request or order to leave an area. However the following Acts of Parliament could be considered:
- Terrorism Act (which gives a statutory power to cordon off an area and it is an offence not to leave a cordoned area immediately).
  - Public Health (Control of Disease) Act 1984, (relating to infection and disease),
  - Children's Act 2004 (relating to wellbeing of the child),
  - Homelessness persons Housing Act 1996
  - Fire and Rescue Services Act 2004

- 11.2 CEPGs working on behalf of organisations will be covered by the specific agencies insurance provisions.
- 11.3 CEPGs activating their own plans without a request from the Emergency Services or Local Authority will be acting under their own Community Group's liability insurance.

## **12. FINANCE**

- 12.1 In most incidents when evacuation is undertaken, the costs will be funded from within individual agency resources.
- 12.2 Further guidance on cross government principles on recovery funding and individual governmental department arrangements can be found in [Emergency Response and Recovery, Chapter 5.5, Funding for Recovery.](#)