East Riding of Yorkshire

Local Flood Risk Management Strategy
2015-2027

Summary Document

"Reducing flood risk, sustaining communities, enabling growth"
1. What is the Local Flood Risk Management Strategy (LFRMS)?

The Local Flood Risk Management Strategy (LFRMS) sets out what the Council intends to do, working with organisations, businesses and communities, to manage the risk of flooding in the East Riding of Yorkshire up to 2027 and beyond. It is of interest to all who live and work in the East Riding, as managing the risk of flooding requires action by everyone, as well as to organisations that have specific responsibilities for managing flood risk in the area such as the Environment Agency, Internal Drainage Boards and the water company.

Since the devastating flooding witnessed in the area in June 2007 and other recent flood events such as the North Sea tidal surge in December 2013, one of the Council’s top priorities has been to improve the East Riding’s resilience to flooding as part of its business planning. Considerable progress has already been made working with partners to secure funding for several large flood alleviation schemes in the area, reducing risk to thousands of properties. The LFRMS sets the course for continuing this momentum, identifying where resources and effort need to be concentrated in the face of ever tighter budgets and wider challenges such as climate change.

In 2010 the Government introduced new legislation\(^1\) to give new powers and responsibilities to local authorities to better manage the risk of flooding in their areas. Under this the Council became a ‘Lead Local Flood Authority’ (LLFA). One of the new duties of a LLFA is to produce a LFRMS. The diagram below shows the topics the LFRMS covers and how the content of the LFRMS is influenced (the ‘drivers’).

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1 The Flood and Water Management Act 2010
1. Where does the LFRMS fit with other strategies and plans?

The LFRMS is one of a number of policies, strategies and plans that guide and influence decisions about flood risk management in the East Riding. At the national level, the National Flood and Coastal Erosion Risk Management Strategy establishes some guiding principles and strategic objectives for flood risk management that LLFAs and other organisations must comply with in carrying out flood risk management duties. There are a number of sub-national and local strategies and plans that direct flood risk management in the area.

At the local level, the LFRMS is aligned with the East Riding Community Plan, the Council’s Business Plan, the emerging Local Plan which allocates land for new development, and the Multi-Agency Flood Plan which informs emergency planning decisions during flooding incidents. The main strategies and plans are shown in the diagram below.
Flood risk management plans (FRMPs)

Because of the large geographical scale of the East Riding and the complexity of flood risk issues affecting different parts of the area, the Council is developing a series of Flood Risk Management Plans (FRMPs) for individual drainage catchments in the East Riding, to identify specific measures and site-level schemes that will reduce the risk of flooding to communities in these locations. The catchments are shown in the plan below.

One of these catchments is the Kingston upon Hull and Haltemprice catchment. This catchment has been designated by Government as a “relevant Flood Risk Area” due to the high concentration of people at risk of flooding in this location. This means the Council has a legal duty to prepare a FRMP by December 2015 for the part of the designation that falls within its administrative boundary to identify what actions will be taken to address the significant flood risk in that area (the City itself is covered by a separate plan prepared by Kingston upon Hull City Council). FRMPs for the other catchments are being prepared with the full suite due to be complete by 2018.

Environmental impacts

Because the LFRMS is a statutory document that may influence land use decisions (like the Council’s Local Plan and Local Transport Plan) it has been formally assessed in accordance with...
with European legislation\(^3\) to identify whether it is likely to have any significant effects on the environment, society and/or the economy. The findings of this exercise are presented in an *Environmental Statement Report* and have been taken into account as part of the development of the LFRMS. The LFRMS has also been subject to a *Habitat Regulations Assessment (HRA)* in accordance with the Habitat Regulations and Conservation of Habitats and Species Regulations 2010. The details of this process are set out in a *HRA Stage 1 Screening Report* and *HRA Stage 2 Appropriate Assessment Report*.

2. **What are the key priorities for flood risk management?**

The LFRMS sets out ten strategic objectives that form the foundation of the LFRMS and signal what the Council’s key priorities are up to 2027 and beyond in respect of reducing the probability of flooding and its impacts on people, the economy and wider environment. These are set out in the table below.

<table>
<thead>
<tr>
<th>LFRMS Strategic Objectives</th>
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<tr>
<td><strong>Objective 1</strong></td>
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<td><strong>Objective 2</strong></td>
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<td><strong>Objective 3</strong></td>
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<td><strong>Objective 4</strong></td>
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<td><strong>Objective 6</strong></td>
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<td><strong>Objective 7</strong></td>
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<td><strong>Objective 8</strong></td>
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<td><strong>Objective 9</strong></td>
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<td><strong>Objective 10</strong></td>
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\(^3\) European Directive 2001/42/EC
3. Which organisations manage flood risk in the East Riding?

Risk Management Authorities

The main flood risk management authorities (RMAs) with responsibilities for flood risk management in the East Riding are:

- **East Riding of Yorkshire Council (ERYC)** - As well as being a LLFA, the Council is a Coastal Erosion Risk Management Authority, Land Drainage Authority, Local Highway Authority, Local Planning Authority, and a Category 1 (Emergency) Responder. The Council is responsible for producing and implementing a LFRMS, maintaining a public register of significant flood risk assets, designating significant assets where appropriate (to ensure their retention), regulating works on ordinary watercourses, maintaining highway gulleys, ensuring new development does not increase flood risk and planning for and responding to flood emergencies. The Council also carries out detailed assessments of flood risk and maintains a substantial capital programme of flood and coastal alleviation schemes, worth approximately £130 million over the next 6 years.

- **Environment Agency (EA)** – an executive agency of the Department of Environment, Food and Rural Affairs (DEFRA) with a strategic overview role for all sources of flooding and operational responsibilities for managing flood risk from main rivers, the sea, and reservoirs. In the East Riding the EA has an important operational role in maintaining stretches of flood banks on main rivers such as the River Hull, River Aire, River Ouse and the Humber Estuary, and in issuing flood warnings to communities in these areas and responding to flood emergencies.

- **Internal Drainage Boards (IDBs)** – These are independent public bodies established in low-lying areas of special drainage need, responsible for water level management. There are 14 IDBs that fall within or partially within the East Riding, amounting to approximately a third of the land area. They play an important role in maintaining ordinary watercourses, outfalls and pumping stations, and are responsible for regulating works on ordinary watercourses within their districts.

- **Yorkshire Water** – a private company, regulated by the Government through Ofwat, with responsibility for providing potable (drinking) water and removing waste water including surface water where a public sewerage system exists for this purpose. The company has a critical role in maintaining the public sewer network in many of the towns and villages in the East Riding, where flood risk is influenced by the capacity of these systems and the operation of terminal sewerage pumping stations.


As well as RMAs, a number of other organisations and private individuals have responsibilities for flood risk management. These include neighbouring local authorities, utility and transport infrastructure providers, parish and town councils and riparian owners. There are various other organisations at national and local levels that are involved in work that relates to or influences flood risk management in the area (e.g. Natural England, Yorkshire Wildlife Trust, insurance providers).
Partnership working

There are a number of formal committees, boards and forums that facilitate partnership working and engagement between RMAs and others locally on flood risk management. These include:

- **East Riding Lead Local Flood Authority Board (LLFA Board)** - one of the Council’s roles as a LLFA is to bring RMAs and all relevant partners together to coordinate priorities as far as possible and deliver flood risk management to maximum effect. The Council’s multi-agency LLFA Board has been established for this purpose, facilitating a strategic and integrated approach to flood risk management in the East Riding. It is chaired by the Council’s Portfolio Holder for Asset Management, Housing and Environment and is attended by other elected members, the Chief Executive, relevant senior officers, and representatives from the Environment Agency, the Association of Drainage Authorities, Yorkshire Water, Natural England, National Farmers Union and Kingston upon Hull City Council.

- **The Yorkshire Regional Flood and Coast Committee (YRFCC)** - comprises elected members appointed by each LLFA within Yorkshire and a number of independent members with relevant expertise, appointed by the EA. The RFCC is empowered to give consent to the programme of capital investment for flood and coastal erosion risk management works to be carried out in the RFCC area. The RFCC also gives consent to the amount of local levy that the EA can charge to the LLFAs in the RFCC area, to supplement national funding.

Other committees/partnerships include the River Hull Advisory Board, Humber Elected Members Forum, Humber Local Resilience Forum, Local Nature Partnerships and Local Catchment Partnerships.

The Council also works closely with the Humber Local Enterprise Partnership (LEP), which is supporting a number of local flood risk management projects in relation to economic growth and regeneration in the area (£44.6m of the £103.7m ‘Growth Deal’ funding awarded to the LEP in 2014 is allocated to flood and coastal risk management projects).

Consultation

The **LFRMS** was published for public consultation in March-April 2015 to ensure that all interested parties had the opportunity to comment on and influence its content. It was accompanied by a draft *Flood Risk Management Plan for the Kingston upon Hull and Haltemprice catchment*, a Draft *Environmental Statement Report* and a Draft *Habitat Regulations Assessment (HRA) Stage 1 Screening Report*. Details of the consultation are provided in the **Consultation Report for the East Riding of Yorkshire Local FRM Strategy**. This sets out the responses received and how these have been taken into account in producing final versions. Information is also provided in an ‘SEA post adoption statement’.
4. Which parts of the East Riding are at risk of flooding?

As recent times have shown, many parts of the East Riding are susceptible to flooding, and the impacts can be wide ranging and severe. Based on national assessments of present-day risk, the East Riding is ranked within the top ten areas in the country with the highest number of homes in areas at risk of river and tidal flooding\(^4\). The risk of surface water flooding is also significant in many parts of the East Riding, as witnessed in June 2007, when the area experienced unprecedented flooding and damages due to exceptionally heavy and prolonged rainfall. The map below shows the areas at risk of flooding from different sources in the East Riding.

The area is reliant on an extensive network of flood risk and drainage infrastructure that has been installed over several centuries to prevent flooding from the sea, estuary and inland watercourses. The low-lying parts of the East Riding are typically characterised by networks of ditches (cuttings) and dykes (embanked raised watercourses), aided by pumping stations and tidal control structures to allow water to drain to the sea. These systems require ongoing maintenance and in some cases improvement to ensure that the risk of flooding continues to be managed into the future.

In addition to the risk of flooding, the East Riding is an area with a rapidly eroding coastline. The soft boulder clay which forms the coastline from Bridlington to Spurn Point erodes at an average rate of 1.5-2.5 metres a year, although isolated individual cliff losses can exceed 20 metres. This poses a threat to houses, farmsteads, holiday home parks and infrastructure situated near the cliff edge.

Some key statistics which highlight the significance of flood risk in the East Riding are presented in the table below.

<table>
<thead>
<tr>
<th>Source of flooding</th>
<th>Residential and commercial properties</th>
<th>Agricultural -ural land (ha)</th>
<th>Main roads (km)</th>
<th>Hospital and health centres</th>
<th>Educational facilities</th>
<th>Listed buildings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tidal (0.5% AEP)</td>
<td>36,311</td>
<td>45,589</td>
<td>54</td>
<td>17</td>
<td>72</td>
<td>250</td>
</tr>
<tr>
<td>Fluvial (1% AEP)</td>
<td>8,202</td>
<td>10,215</td>
<td>35</td>
<td>11</td>
<td>20</td>
<td>157</td>
</tr>
<tr>
<td>Surface water (1%AEP)</td>
<td>20,540</td>
<td>5,559</td>
<td>83</td>
<td>19</td>
<td>79</td>
<td>316</td>
</tr>
<tr>
<td>Ground water</td>
<td>130,794</td>
<td>108,853</td>
<td>237</td>
<td>97</td>
<td>257</td>
<td>1,686</td>
</tr>
<tr>
<td>Combination of sources</td>
<td>142,554</td>
<td>131,108</td>
<td>267</td>
<td>99</td>
<td>288</td>
<td>1,806</td>
</tr>
</tbody>
</table>

AEP – Annual Exceedance Probability – The percentage probability of the flood event in any given year.

The level of flood risk is expected to increase in the future due to climate change, with greater quantities of rainfall and rises in sea level.

5. How will we manage this risk?

To address the key flood risk issues in the East Riding and achieve the LFRMS strategic objectives, the LFRMS sets out a series of measures that will be pursued over the life of the LFRMS. Many of these are procedural measures or ‘rules’ that will direct the way the Council carries out its flood risk management responsibilities and works with others to achieve greater investment in flood risk management in the area. Together, the measures will enable the Council to better:

- **prepare** for flooding through improved forecasting and warning;
- **prevent** flooding by not allowing new development to be built in areas at risk;
- **protect** against flooding by constructing and maintaining defences;
- **recover** from flooding by providing temporary accommodation to flood victims.

More detailed measures such as physical works and site-specific projects will be identified in the catchment-specific FRMPs.
6. **What funding is available to manage flood risk?**

The main sources and opportunities for funding are summarised below.

- **Flood Defence Grant in Aid (FDGiA) (capital)** – this is the traditional source of funding for flood risk management schemes in England. It is administered by the EA on behalf of DEFRA and is distributed to schemes that offer protection to the greatest numbers of residential properties. As a rural authority, it has proven challenging to secure funding from this source. In recent years the Government has encouraged RMAs to seek contributions from alternative sources to secure a proportion of FDGiA, and while the Council has had some success in securing external funding for larger schemes in the area such as the European Regional Development Fund for the Willerby and Derringham Flood Alleviation Scheme and Local Growth Funding, it is generally difficult to do so without initially securing a substantial proportion of FDGiA.

- **FDGiA (revenue)** – this funds operational / maintenance activities and is also administered by the EA. This budget has been subject to incremental cuts in recent years, resulting in only 25-50% of scheduled maintenance being funded in the East Riding, even with the supplement from IDB precepts. The Council is seeking opportunities through partnership working for local organisations to explore and implement more efficient methods of maintenance expenditure.
LLFA revenue - since 2013 funding has been provided to LLFAs through the Local Government Finance Settlement (the Settlement Funding Assessment or SFA) and Local Services Support Grant to support LLFA responsibilities; the Council’s 2015-16 finance settlement included a total of £282,000 for this purpose. Although the funding is not ring-fenced, the Council has consistently allocated all of its budget to deliver flood risk management activities, including to support a programme of flood risk management schemes.

Other potential funding sources include regional funding (‘Local Levy’), water company business planning, and established funding streams such as the European Union Structural Investment Funds and Local Growth Fund. There may also be opportunities through the Countryside Stewardship Scheme, developer contributions and private contributors / beneficiaries. The Council is working hard with partners to secure funding from as many of these sources as possible.

7. How will the LFRMS be monitored?

The success of the LFRMS depends on considerable effort by all relevant parties working together and allocating resources prudently.

Progress will be monitored annually via reporting to the Council’s Environment and Regeneration Overview and Scrutiny Sub-Committee. Officers will also submit regular progress reports on elements of the LFRMS to specific flood risk committees and advisory boards established for this purpose.

The LFRMS will be formally reviewed in accordance with the statutory cycles set out in the 2009 Flood Risk Regulations. These require updates every six years, the first being by December 2021. If, in the interim, there are significant changes in Government policy, changes in funding arrangements, publication of substantial new evidence that presents a considerably different picture of flood risk, or poor/accelerated performance against a number of objectives and measures, an earlier review will be triggered.

8. Where can I find further information?

For further information about the Local Flood Risk Management Strategy, please contact us using the details below.

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