

Lincolnshire County Council Lead Local Flood Authority

Preliminary Flood Risk Assessment Preliminary Assessment Report Appendices

Final

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Flooding at Stamp End, Lincoln – June/July 2007

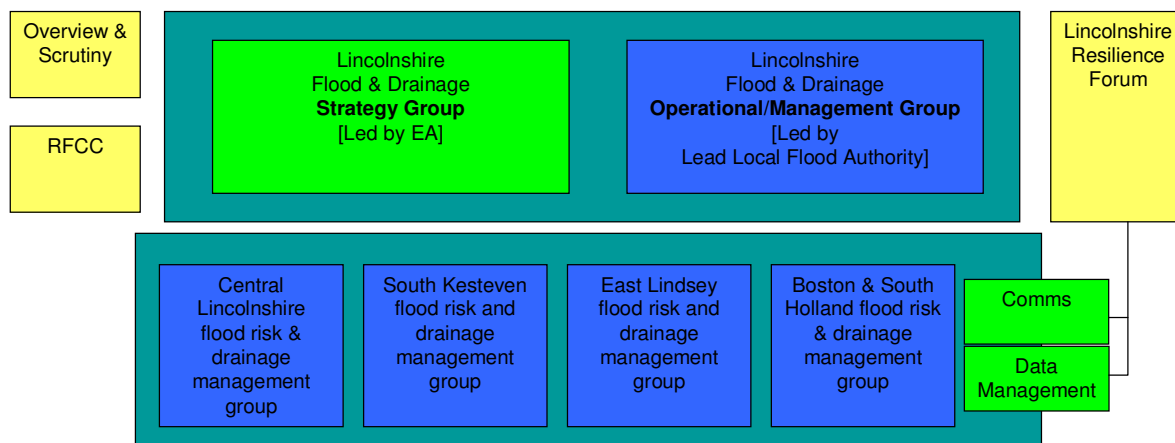
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Appendix A: Terms of Reference of Lincolnshire Flood Risk and Drainage Management Framework

LINCOLNSHIRE FLOOD RISK AND DRAINAGE MANAGEMENT FRAMEWORK

June 2010



PARTNER ORGANISATIONS

The Environment Agency	North East Lindsey IDB
Lincolnshire County Council	Lindsey Marsh DB
West Lindsey District Council	Witham First District IDB
East Lindsey District Council	Upper Witham IDB
City of Lincoln Council	Witham Third IDB
North Kesteven District Council	Witham Fourth District IDB
South Kesteven District Council	Black Sluice IDB
Boston Borough Council	Welland and Deepings IDB
South Holland District Council	South Holland IDB
ADA (Lincolnshire Branch)	North Level IDB
Gainsborough IDB	King's Lynn IDB
Newark Area IDB	Anglian Water
Ancholme IDB	Severn Trent Water

OVERVIEW

This partnership framework is designed to provide co-ordinated management and delivery of flood risk and drainage functions of all relevant organisations across Lincolnshire.

The framework implements the recommendations of the Pitt Review and the provisions of the Flood and Water Management Act 2010 in a way that is tailored to suit the geographical, social, economic and environmental characteristics of Lincolnshire.

Its purpose is to ensure that local communities and infrastructure are better protected from flood risk, and that improved resilience towards flooding is built into all aspects of planning and service provision in the future.

The **Strategy Group** is an initiative unique to Lincolnshire. Its purpose is to ensure that we integrate the strategic direction of the Environment Agency's flood and coastal risk management overview role with that of the new leadership role of the lead local flood authority. It will also act as a key point of contact with the **Lincolnshire Resilience Forum**. It will be chaired by the Environment Agency.

The **Operations Group** delivers the responsibilities of the lead local flood authority. It will be chaired by Lincolnshire County Council with support from the Environment Agency, District Councils, Anglian Water and Internal Drainage Boards through the Lincolnshire branch of the Association of Drainage Authorities. Its role is to co-ordinate key countywide functions, empowering the **Local Flood Risk and Drainage Management Groups** to deliver flood risk management and drainage solutions at the local level.

The **Local Flood Risk and Drainage Management Groups** will build on the existing local drainage groups. Their function is to provide flood risk management and drainage solutions developed by the consensus of partner organisations and tailored to meet local circumstances. They are the delivery arm of the Lincolnshire Flood Risk and Drainage Management Framework. They are based on Local Development Framework boundaries.

Detailed arrangements for **Local Authority Scrutiny**, as required under the Floods and Water Management Act, will be developed during 2010, while linkages with the Regional Flood and Coastal Committee will be defined as the role of that body is clarified by the Act.

A **communications strategy** will be developed and implemented during 2010, building on work in progress through the Lincolnshire coastal change pathfinder. Its purpose will be to improve communications between agencies in the partnership and between service providers and local people. It will be linked to effective management of data through the flood risk management asset register and reporting arrangements developed to support delivery of improved flood risk management for local communities.

STRATEGY GROUP

Role

The group's role will be to take a strategic overview of the entirety of flood risk and drainage management across Lincolnshire, including from all inland flooding sources and from the coast. It will ensure effective integration of flood risk planning and response at a strategic level in the county. The group will be chaired by the Environment Agency, and will meet twice a year. It will consist of senior officers and Members from each of the organisations that deliver flood risk and drainage services within Lincolnshire.

Tasks

- Strategic guidance to the Operational Management Group
- Regular reviews of partnership roles and performance
- Promote co-ordinated approaches to flood and coastal risk management investment, planning and delivery across Lincolnshire, integrated with arrangements for emergency response
- Assess the implications of flood, coastal and drainage risk management strategies for Lincolnshire and agree appropriate joint approaches to their development (for example Shoreline Management Plans, Catchment Flood Management Plans, the Coastal Study, Multi-Agency Flood Plans, and the Regional Spatial Strategy). This will need to take account of outcomes and developments at Regional and local level, particularly in relation to planning policy
- Promote risk-based investment strategies and plans for flood risk and drainage management across Lincolnshire
- Maximise opportunities to influence partner strategies and resource allocation and to maximise external funding
- Guide the development of joint strategies for promoting public awareness and confidence in flood, coastal and drainage risk management arrangements, ensuring effective linkage with communications developed through the Lincolnshire Resilience Forum in respect of emergency situations
- Exchange and develop policy with the Operational Management Group

Membership

- Environment Agency (Area Manager - Andy Baxendale) (Chair)
- Lincolnshire County Council (Portfolio Holder - Cllr Eddy Poll; Director/Assistant Director - Richard Wills/Richard Belfield)
- District Councils (Portfolio Holder - Cllr Richard Dungworth; Chief Executive – Nigel Howells)
- Internal Drainage Boards (Chairman - Sam Markillie; IDBs/ADA Officer - David Sisson)
- Anglian Water (Catchment Manager - Peter Joyce)
- Lincolnshire Resilience Forum (Secretary – David Powell)
- Regional Flood and Coastal Committee (Chair – Robert Caudwell)

Frequency

Every six months

Secretariat

Environment Agency

Key Links

- Operational Management Group
- Regional Flood Defence Committee (to become Regional Flood and Coastal Committee)
- Local Authority Scrutiny
- Lincolnshire Resilience Forum

OPERATIONAL MANAGEMENT GROUP

Role

The group's role is to implement the roles and responsibilities of the lead local flood authority. It will produce the local flood and coastal flood risk strategy and co-ordinate delivery by partner organisations.

The group's principal output will be the establishment of a single integrated strategy for local flood risk management. This will be achieved through a work programme implementing key strategies and plans and determined by the group.

As well as ensuring that countywide strategic resources are in place, such as the flood risk asset register and shared information systems, the group will work to resolve specific issues as they arise. This will include addressing uncertainties over individual partners' flood risk and drainage management roles and responsibilities, strategic issues in respect of a particular development, or local issues as and when referred by a local delivery group.

The operations management group will be chaired by Lincolnshire County Council. It will meet initially at least every two months, and will consist of senior operational officers from each of the organisations that deliver flood and surface water risk and drainage services within Lincolnshire.

Initial Tasks

To co-ordinate mapping of partners' resources and responsibilities, currently and under proposed legislation against anticipated future requirements and local needs

To establish an on-going register of all strategies and plans on flood risk held within the county. This could be linked to flood risk management information in the domain. This would enable developers and other parties undertaking work that could affect flood risk to access comprehensive information on relevant strategies and plans, as well as technical work carried out and planned within the county.

To ensure development of the flood risk management asset register.

Ongoing Tasks

Core

- Develop and implement local flood risk management strategies and plans, ensuring appropriate monitoring and reporting arrangements
- Focus delivery functions and funding on surface water, groundwater and ordinary watercourses
- Oversee the delivery of partners' flood risk management work and funding
- Commission and co-ordinate development of Surface Water Management Plans
- Support implementation of action plans for (eg), SMPs, CFMPs, Coastal Study options, relevant elements of the countywide Sustainable Community Strategy and Local Area Agreement. This will include ensuring effective liaison with established groups such as the Eastern Coastal Authority Group and the North East Coastal Group with their aim to influence the strategic management of the risk from sea flooding and coastal erosion.
- Prioritise available funding and resource for partnership initiatives and co-ordinate bids for additional funding, supporting the Lead Local Flood Authority to deploy resources where needed
- Ensure data sharing and communications mechanisms meet the needs of partner organisations and local communities
- Provide a focal point for liaison with the delivery arms of all relevant partner organisations within Lincolnshire, including the County Council and District Councils (particularly highways, planning and building control services), Environment Agency, Internal Drainage Boards, water and sewerage companies, developers, statutory undertakers, emergency services, riparian landowners and developers, in order to facilitate enhanced joint working between partners
- Provide reports to Local Authority scrutiny committee and manage and co-ordinate flow of requests for information for scrutiny and other purposes
- Liaise with the Regional Flood and Coastal Committee on the production of local strategies
- Ensure that elected Members are fully briefed on all aspects of flood, coastal and drainage risk management affecting Lincolnshire
- Resolve problems referred by Local Flood Risk and Drainage Groups
- With regards to SUDS and other drainage solutions work with local planning authorities and building control to establish common objectives and outcomes

Additional

- Provide a forum for local planning authorities to provide a consistent view for developers proposing major development within Lincolnshire, including informing developers of key aspects such as SUDS design criteria
- Support the Lincolnshire Resilience Forum, ensuring lessons learned from emergency incidents inform approach to long-term flood and drainage management, particularly with regard to resilience and planning

- Co-ordinate and support development of commissioning arrangements that may be established between partners
- Provide an arbitration role on responsibility for assets and for roles and responsibilities arising from new arrangements
- Support preparation of joint flood risk management asset register and associated asset management plans
- Exchange and develop local policy ideas with Strategy Group

Membership

- Environment Agency (Flood and Coastal Risk Manager – Ian Russell)
- Lead Local Flood Authority (Assistant Director – Richard Belfield) (Chair)
- District Councils (Director – James Nicholson)
- Internal Drainage Boards (Chief Executives – Chris Elkington, Stuart Hemmings, Peter Bateson, Maralyn Robinson; substitutes have also been nominated for each representative)
- Anglian Water (Catchment Manager – Peter Joyce)
- Highways Authority (Assistant Director – Paul Coathup)
- Lincolnshire Resilience Forum (Secretary – David Powell)
- One member from each local flood risk and drainage management group (To be confirmed when all four local groups have been established)

Frequency

Every two months

Secretariat

Lincolnshire County Council

Key Links

- Strategy Group
- Local Delivery Groups
- Local Authority Scrutiny
- Lincolnshire Resilience Forum

LOCAL FLOOD RISK AND DRAINAGE MANAGEMENT GROUPS

Role

Local Flood Risk and Drainage Management Groups will deliver local projects and solutions to flood and surface water risk and drainage management. They will maximise opportunities to co-ordinate partner resources with the objective of providing an integrated approach to managing flood risk for local communities.

They will take a proactive approach towards identifying and solving local flood risk issues, and will provide a first point of contact for members of the public and local members. They will work to develop and maintain effective working partnerships with all relevant partner agencies delivering flood risk and drainage services at local level.

The Local Flood Risk and Drainage Management Groups will be based on Local Development Framework boundaries. They will build on the existing local drainage groups, with enhanced support provided through the framework, including a coherent strategic and policy environment and a greater capacity to co-ordinate opportunities for funding and provision of resources.

Local Flood Risk and Drainage Management Groups will meet as often as necessary to conduct their business, and will consist of service managers from all relevant partner agencies with responsibility for delivery within the local area. They will be chaired by the Lead Local Flood Authority.

Tasks

- Deliver work programmes/action plans as directed by the Operations Management Group
- Integrate and share partners knowledge concerning flood risk and drainage issues
- Improve co-ordination at local delivery level between a range of partners, including use of enforcement and consenting powers on ordinary watercourses
- Improve effectiveness of use of partners' resources
- Maintain joint flood risk management asset register and associated asset management plans
- Monitor minor works for reporting on an exception basis to the Operational Management Group
- Provide training and advice to planning committees on all aspects of flood risk and drainage management in order to assist the decision-making process with regard to development control
- Provide a single point of contact for developers to consult with local planning authorities on SUDS and other drainage solutions
- Inform local planning authority processes through engaging with long-term development of Local Development Frameworks
- Enable organisations that are not statutory consultees in the planning process to have a voice concerning assets they may have to adopt in the future and avoid problems currently faced
- Inform development plans, infrastructure planning, asset operation and maintenance
- Assess planning applications for large, new developments and identify the most appropriate mechanism of drainage for the site
- To identify and deliver bespoke solutions to flooding problems experienced by local communities on a day-to-day basis
- Where solutions cannot be found quickly at local level, to refer such situations to the Operations Management Group for resolution

- Investigate local flooding incidents with all relevant parties to identify the source of a flooding incident and the responsibility for addressing it.
- To implement learning from emergency situations to ensure that resilience and mitigation measures as locally appropriate are adopted by private, public and commercial landowners
- Manage communications flow with local communities on day-to-day basis, including cascading necessary information to Operations Management Group

Membership

Membership will vary depending on local circumstances. As the local groups are established they will determine the best attendance and liaison arrangements to ensure effective co-ordination of service delivery. Suggested membership common to all four local groups is set out below.

- Environment Agency (As determined by Flood and Coastal Risk Manager)
- Lead Local Flood Authority (Area Manager)
- District Council(s) (Head of Service or Service Manager)
- Anglian Water (Senior Asset Planner)
- Severn Trent Water (TBC)
- Internal Drainage Board(s) (As required to ensure effective functioning of group)
- Lincolnshire Resilience Forum (Emergency Planning Officer)
- Developers and consultants as appropriate

Frequency

As often as required to conduct the business of the group

Secretariat

To be decided by Groups

Key Links

Operations Management Group

Lincolnshire Resilience Forum

Organisational Membership of Local Flood Risk and Drainage Management Groups

<p>Central Lincolnshire</p> <p>Environment Agency</p> <p>Lincolnshire County Council</p> <p>West Lindsey District Council</p> <p>City of Lincoln Council</p> <p>North Kesteven District Council</p> <p>Joint Central Lincolnshire Planning Authority</p> <p>North-East Lindsey IDB</p> <p>Ancholme IDB</p>	<p>East Lindsey</p> <p>Environment Agency</p> <p>Lincolnshire County Council</p> <p>East Lindsey District Council</p> <p>Lindsey Marsh IDB</p> <p>Witham Third IDB</p> <p>Witham Fourth IDB</p> <p>Anglian Water</p> <p>Lincolnshire Resilience Forum</p>
<p>South Kesteven</p> <p>Environment Agency</p> <p>Lincolnshire County Council</p> <p>South Kesteven District Council</p> <p>Upper Witham IDB</p> <p>Black Sluice IDB</p> <p>Welland and Deepings IDB</p> <p>Anglian Water</p>	<p>Boston & South Holland</p> <p>Environment Agency</p> <p>Lincolnshire County Council</p> <p>Boston Borough Council</p> <p>South Holland District Council</p> <p>Witham Fourth IDB</p> <p>Black Sluice IDB</p> <p>Welland and Deepings IDB</p>

SCRUTINY

Under the Flood and Water Management Bill, Lead Local Flood Authorities are required to ensure that robust local authority elected member scrutiny is put in place. This is reinforced by specific provisions that require flood risk management authorities to provide information or reports to the Scrutiny Committee, and to have regard to recommendations made by the Committee.

While local authorities will wish to make arrangements to ensure appropriate internal controls and scrutiny over their own flood risk management resource, it is anticipated that the role envisaged in the Bill will be performed by newly established scrutiny arrangements. The experience gained from the operation of the joint Health Scrutiny Committee may provide guidance in this regard. The nature of these arrangements will be determined by elected Members.

LOCAL RESILIENCE FORUM

The Lincolnshire Resilience Forum has played an active role in promoting aspects of the Pitt Review recommendations in relation to flooding emergencies. Effective partnership working is in place to develop the multi-agency flood plan setting out the roles and responsibilities of all partners in response to specific emergency situations across Lincolnshire. In particular attention has been focused on the challenge of potential evacuation scenarios for the East Coast.

While the core role of the Resilience Forum is to prepare for and respond to emergency situations, there are very strong links between the day to day management of flood risk and drainage and preparedness for flooding emergencies. In many ways they can be seen as two sides of the same coin, depending upon the same datasets and risk information.

It is anticipated that the flood risk and drainage management framework and the multi-agency flood plan will be mutually reinforcing through shared communications channels, data management systems, support for strategic development and promoting resilience to flood risk through day-to-day operations of the partner flood risk management authorities.

The Resilience Forum is represented within the partnership framework on the Strategy Board and the Operational Management Group, and plays a significant role in the local drainage groups, not least through supporting the provision and development of shared data on local incidents of flooding.

REGIONAL FLOOD AND COASTAL COMMITTEE

The Flood and Water Management Bill replaces Regional Flood Defence Committees with Regional Flood and Coastal Committees (RFCCs). It is the responsibility of the Environment Agency to ensure that RFCCs are established in each of the Agency's regions.

Environment Agency and elected Member representation on the partnership framework will provide links with the RFCC, including ensuring that elected Members on the RFCC are fully briefed on current issues. The partners to the framework will liaise with the RFCC on key policy developments, such as the national and local Flood Risk Management Strategies.

DATA MANAGEMENT AND COMMUNICATIONS

Data management and sharing will be fundamental to effective operation of the partnership framework. Initiatives are currently in progress to deliver this function. These are being developed in respect of emergency response requirements in the first instance but have been designed to consider long-term 'day-to-day' requirements and the provisions of the Flood and Water Management Bill.

Communications provisions for emergency warning and response purposes are quite different from those required for normal conditions. There is clearly a need for community engagement to improve awareness of flood risk and access to information about forthcoming emergency situations. However, there is also a need for a more long-term approach to engaging with communities across Lincolnshire to promote a more informed attitude to living with flood risk and to embed mitigation of flood risk as a normal consideration for property owners, developers and insurance companies.

This will be fully explored during 2010 through the coastal change pathfinder for Lincolnshire, which has been awarded in order to establish best practice in supporting local communities adapt to the long-term impacts of climate change. Although designed for the coastal zone, it is likely that methodologies successful on the coast will be adaptable for use across the county.

ROLES AND RESPONSIBILITIES OF FLOOD RISK MANAGEMENT AUTHORITIES WITHIN THE PARTNERSHIP FRAMEWORK

The table below summarises the roles and responsibilities incumbent on Flood Risk Management Authorities, in terms of specific tasks and related to the most relevant partnership groupings.

Strategy Group	
Role/Responsibility	Organisation
Prepare National Flood and Coastal Erosion Risk Management Strategy	Environment Agency
Provide guidance to other flood risk management authorities	Environment Agency
Duty to act consistently with National Flood and Coastal Erosion Risk Management	LLFA

Strategy	District Councils IDBs Water Companies
Prepare local flood risk management plans (eg SMPs, CFMPs) for coasts & main rivers	Environment Agency
Contribute to local flood risk management plans and strategies – e.g. SMPs, CFMPs, Coastal Study	All flood risk management authorities
Prepare national preliminary flood risk assessment & flood risk maps	Environment Agency
Duty to co-operate with other risk management authorities	All risk management authorities
Strategic leadership for all surface water issues in Lincolnshire	LLFA
Duty to have regard to Local Flood Risk Management Plan	Environment Agency Water Companies
Duty to act consistently with Local Flood Risk Management Plan	District Councils IDBs
Establish and maintain local authority scrutiny function	LLFA
Provide information to local authority scrutiny and have regard to recommendations	All flood risk management authorities
Flood warning	Environment Agency
Local Authority Scrutiny	LLFA District Councils
Liaison with Regional Flood and Coastal Committee	All flood risk management authorities
Liaison with Lincolnshire Resilience Forum (strategic)	All flood risk management authorities

Operational Management Group	
Duty to act consistently with National Flood and Coastal Erosion Risk Management Strategy	EA LLFA District Councils IDBs Water Companies
Prepare local flood risk management plans (eg SMPs, CFMPs) for coasts & main rivers	Environment Agency
Contribute to local flood risk management plans and strategies – e.g. SMPs, CFMPs, Coastal Study	All flood risk management authorities
Prepare local flood risk management strategies (eg Lincshire Strategy, Witham Strategy)	Environment Agency
Prepare national preliminary flood risk assessment & flood risk maps	Environment Agency
Duty to co-operate with other risk management authorities	All risk management authorities
Strategic leadership for all surface water issues in Lincolnshire	LLFA
Prepare Local Flood Risk Management Plan	LLFA
Provide guidance on working with local flood risk management plan	LLFA
Contribute to developing Local Flood Management Strategy	Environment Agency District Councils IDBs Water Companies
Duty to have regard to Local Flood Risk Management Plan	Environment Agency

	Water Companies
Duty to act consistently with Local Flood Risk Management Plan	District Councils IDBs
Preliminary flood risk assessment & flood maps	LLFA
Power to request information from risk management authorities	Environment Agency LLFA
Compile & maintain flood risk management asset register	LLFA
Provision of asset management data	All flood risk management authorities
Developing Surface Water Management Plans	LLFA District Councils IDBs Water Companies
Strategic spatial planning – statutory consultation on flood risk and drainage aspects of planning applications	LLFA District Councils
Establish and maintain local authority scrutiny function	LLFA
Provide information to local authority scrutiny and have regard to recommendations	All flood risk management authorities
Flood warning	Environment Agency
Liaison with Regional Flood and Coastal Committee	All flood risk management authorities
Liaison with Lincolnshire Resilience Forum (strategic)	All flood risk management authorities
Capital Improvement Work National Grant in Aid (G.I.A.)	Environment Agency

Capital Work –Local Levy incl General Drainage Charge	Environment Agency
Administer Grants for IDBs and Las e.g. GIA Capital , Property Resilience grant, SWMP grant	Environment Agency
Duty to act in accordance with principles of sustainable development (incl. biodiversity & environmental protection duties)	All flood risk management authorities
Delegate works and maintenance to other flood risk management authorities, incl. commissioning, contract management &c	Environment Agency LLFA District Councils IDBs
Respond to Regional Spatial Strategy flood risk policies	LLFA District Councils
Advising on and determining planning applications in flood risk areas	District Councils LLFA
Advice and guidance to planning authorities	Environment Agency IDBs LLFA
Data management & development of core resources for flood risk management & emergency response	All flood risk management authorities & LRF
Local Flood Risk and Drainage Management Groups	
Duty to act consistently with National Flood and Coastal Erosion Risk Management Strategy	LLFA District Councils IDBs

	Water Companies
Contribute to local flood risk management plans and strategies – e.g. SMPs, CFMPs, Coastal Study	All flood risk management authorities
Duty to co-operate with other risk management authorities	All risk management authorities
Strategic leadership for all surface water issues in Lincolnshire	LLFA
Contribute to developing Local Flood Management Strategy	Environment Agency District Councils IDBs Water Companies
Duty to have regard to Local Flood Risk Management Plan	Environment Agency Water Companies
Duty to act consistently with Local Flood Risk Management Plan	District Councils IDBs
Provision of asset management data	All flood risk management authorities
Developing Surface Water Management Plans	LLFA District Councils IDBs Water Companies
Strategic spatial planning – statutory consultation on flood risk and drainage aspects of planning applications	LLFA District Councils
Provide information to local authority scrutiny and have regard to recommendations	All flood risk management authorities
Flood warning	Environment Agency
Raise flood risk awareness – coastal and	Environment Agency

rivers	
Prepare & review Strategic Flood Risk Assessments	District Councils
Raise flood risk awareness – surface water	All flood risk management authorities
Raise flood risk awareness – coastal and rivers	Environment Agency
Implement local flood risk management plans (eg SMPs, CFMPs) for coasts & main rivers	Environment Agency
River and Coastal Maintenance	Environment Agency
Asset & infrastructure surveys, inspections & maintenance – maintain databases	All flood risk authorities
Inspect & maintain EA reservoirs	Environment Agency
Enforcement on third party reservoirs	Environment Agency
Investigate incidents of flooding and assign responsibility where necessary	LLFA
Enforcement, consent and works on coast and main rivers	Environment Agency
Enforcement and consenting on ordinary watercourses	LLFA IDBs
Works powers on ordinary watercourses	District Councils IDBs
Undertake flood risk management schemes & maintain existing flood risk management measures	All flood risk management authorities
Enforcement on riparian owners	LLFA

	District Councils IDBs
Designation of features as flood risk management assets, with enforcement powers, incl. third party assets	Environment Agency LLFA IDBs District Councils
Land drainage & irrigation	IDBs
Water level management	IDBs
Manage areas of special flood risk	IDBs
Flood risk management works outside IDB areas	LLFA
Own and maintain public sewers	Water Companies
Emergency Call out and responses, sandbags and materials – first response work.	All flood risk management authorities
Data management & development of core resources for flood risk management & emergency response	All flood risk management authorities & LRF
Approve, adopt & maintain sustainable drainage systems	LLFA
Detailed negotiation with developers on SUDS	District Councils
SUDS enforcement and contractual management	LLFA
Consult LLFA on all flood risk and drainage aspects of planning applications	District Councils
Technical consultancy; site investigation/surveys [S38 & S278 design checks, technical and expert advice to others including pre	LLFA

planning app. meetings, resourcing/directing drainage investigations, feasibility reports, drainage design including major projects, hydraulic analysis & modelling, maintaining/revising design guides, training	
Develop flood risk planning policies for LDF in line with local flood risk management plan	District Councils
Respond to Regional Spatial Strategy flood risk policies	LLFA District Councils
Site specific flood risk appraisals and consultation with partners	LLFA District Councils IDBs Water Companies
Advising on and determining planning applications in flood risk areas	District Councils LLFA
Advice to public	LLFA District Councils IDBs
Advice and guidance to planning authorities	Environment Agency IDBs LLFA

Appendix B: Parish flood history pro-forma sent to Parish Councils

Summary of History of Surface Water Flooding

(Please use one sheet per flooding occurrence or flooded area and attach any plans, drawings or maps etc. if available. Also, please copy/use extra sheets as required.)

Q 1 Name of Parish/Town Council:
Contact name and email address:
Telephone number:

Q 2 **WHERE** and **WHEN** has significant surface water flooding occurred in the past affecting domestic and commercial properties etc?
Location/Area: Date/Duration:

Q 3 Generally **HOW** frequent and severe has flooding been in the past?
Number of times happened: Approx depth and fast/slow flowing:

Q 4 **WHY** did surface water flooding occur?

Q 5 **WHAT** was the impact on the local community?
Types and no' of properties/critical services/area of land and problems etc:

Q 6 Any other information, maps/plans/photo's provided or available?

**Appendix C: Data capture template used by partners
to collect summary flood risk
information and metadata**

Lincs PFRA	Data Capture Template No 1 <u>Overview of current surface water flooding and flood risk data & information held within Partner organisations.</u>	Please write your brief initial answers below and we'll come back to you for further information where necessary.
Q1.	FR&DMG Member Organisation?	
Q2.	Key contact for data collection activity?	Name: Position: Tel No: Email:
Q3.	Office location/s where data held?	a) etc.
Q4.	Overview of relevant surface water flooding and flood risk data held and in what format? Please indicate whether it is: "POINT LOCATION" related to flooded property or flood levels and whether it is HISTORIC or MODELLED or "POLYGON DATA" related to recorded	a) b) c)

	HISTORIC flood event outlines or MODELLED flood outlines.	(Please photocopy additional pages as required)
Q5.	Do local historic surface water flood maps exist and if so, where are they held and in what form?	
Q6.	What electronic GIS or software is used to store, view and manipulate data and maps e.g. ArcView, Map Info, Plan Web or DataShare etc?	
Q7.	Is your surface water flooding data available to the public to view and/or “take home” and if so, where can they do this and in what form e.g. internet website or office in paper form/copies etc.	
Q8.	Any other overview information that you feel may be helpful at this stage?	

Appendix D: Local flood risk area vulnerability indicators template

HUMAN HEALTH (1)								
FR&DM G Area	FRA Name:	Unit	Directly impacted by historic flooding (Taken from Partner's current records/hot spots/parish info)	Directly impacted by future flooding (Taken from EA Areas Susceptible to Surface Water Flooding Maps)	Directly impacted by future flooding (Taken from EA Flood Maps for Surface Water)	Total directly impacted by flooding (Highest Gross)	Proportion of overall community in FRA directly impacted by flooding (%)	Comments
1A	Number of properties (All types)	No						
	Number of people (props x 2.34)							
1B	Number of Critical Services & Infrastructure Sites:	No						
	Hospitals							
	Health Centres							
	Clinics							
	Surgeries							
	Pharmacy							
	Colleges							
	Schools							
	Day Nurseries							
	Care/Nursing Homes							

	Village & Town Halls/Rest Feeding Centres							
	Police Stations							
	Ambulance Stations							
	Fire & Rescue Stations							
	Electricity Stations							
	Gas Stations							
	Sewage Treatment Works							
	Sewage Pumping Stations							
	Water Treatment Works & Pumping Stations							

ENVIRONMENT (2)								
<u>FR&DM G Area</u>	<u>CFRA Name: FRA Name:</u>	Unit	Directly impacted by historic flooding (Taken from Partner's current records/hot spots/parish info)	Directly impacted by future flooding (Taken from EA Areas Susceptible to Surface Water Flooding Maps)	Directly impacted by future flooding (Taken from EA Flood Maps for Surface Water)	Total directly impacted by flooding (Gross)	Proportion of overall community in FRA directly impacted by flooding (%)	Comments
2A	Number of EU Designated Sites:	No						

	Special protection Areas (SPAs)							
	Special Areas of Conservation (SACs)							
	RAMSAR Sites							
	BAP Habitats							
	Special Sites of Scientific Interest (SSSIs)							
2B	Number of designated Local Nature Sites	No						

CULTURAL HERITAGE (3)								
<u>FR&DM G Area</u>	<u>FRA Name:</u>	Unit	Directly impacted by historic flooding (Taken from Partner's current records/hot spots/parish info)	Directly impacted by future flooding (Taken from EA Areas Susceptible to Surface Water Flooding Maps)	Future Flooding Directly impacted by future flooding (Taken from EA Flood Maps for Surface Water)	Total (Total directly impacted by flooding (Gross))	Proportion of overall community in FRA directly impacted by flooding (%)	Comments
3A	Number of World Heritage Sites	No						
3B	Number of Listed Buildings	No						

<u>ECONOMIC ACTIVITY (4)</u>								
<u>LDF Area FR&DM G Area</u>	<u>FRA Name:</u>	Unit	Directly impacted by historic flooding (Taken from Partner's current records/hot spots/parish info)	Directly impacted by future flooding (Taken from EA Areas Susceptible to Surface Water Flooding Maps)	Directly impacted by future flooding (Taken from EA Flood Maps for Surface Water)	Total directly impacted by flooding (Gross)	Proportion of overall community in FRA directly impacted by flooding (%)	Comments
4A	Number of commercial properties	No	1					
4B	Area of good quality agricultural land based on Agricultural Land Class from CFMP	SqKm						
4C	Length of main roads	Km	?					
4D	Number of bus depots	No						
4E	Length of railway	Km						
4F	Number of railway stations	No						
4G	Number of supermarkets	No						

NOTE: Table E-1 Default Indicators contained within EA PFRA Guidance Appendix E. is reproduced below for information.

Table E-1: Default indicators

Essential Receptor Data	Flood Risk Indicators
Human Health	
Number of people	2.5 * residential houses within SW outline within 1km grid square Surface Water - use 0.5% AEP outline within grid square Groundwater - use buildings with basements within grid square
Critical Services Number of hospitals, health centres, clinics, surgeries Number of colleges, Schools, day nurseries, nursing homes Number of emergency services (police, fire, ambulance) stations	Simple count inside flood outlines within grid square
Environment	
EU designated sites: (Special Protection Areas, Special Areas of Conservation) which are water dependent, and RAMSAR sites Area or incidence of BAP habitats	Area in flood outline within grid square. It is often the combination of flooded habitat with a pollution source that is important. It may be important to include: No WWTW, No IPRI/IPPC sites
Cultural Heritage	
World heritage sites	Simple count inside flood outlines within grid square
Economic Activity	
Number of residential and commercial properties	Simple count inside flood outlines
Good quality agricultural land based on Agricultural Land Class from CFMP	Sum of area of productive land flooded in outline within grid square
Length of main roads and railway & underground - GW	Computation of length of key infrastructure within grid square

Appendix E: Joint scrutiny and approval arrangements

Timeline of Dates for PFRA Completion

