

Lincolnshire Flood Risk and Water Management Partnership



Joint Lincolnshire Flood Risk and Water Management Strategy 2019-2050

Part 3 of 3

Action Plan 2021-2022

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1 Introduction

Lincolnshire County Council, as the Lead Local Flood Authority for the county, is required by legislation to work with other Risk Management Authorities to develop, maintain, apply and monitor a Local Flood Risk Management Strategy, which must be consistent with the Environment Agency's National Flood and Coastal Erosion Risk Management Strategy.

The Risk Management Authorities are:

- Lincolnshire County Council
- The Environment Agency
- The 14 internal drainage boards operating in Lincolnshire
- The 7 district councils in Lincolnshire
- The two water and sewerage companies operating in Lincolnshire

To improve the way we work together, these organisations created the Lincolnshire Flood Risk and Water Management Partnership in April 2010, and they are joined by:

- Natural England
- The regional flood & coastal committee
- The Lincolnshire Resilience Forum (authorities responsible for planning for and responding to emergencies of all kinds)

The partnership has worked together to agree the Joint Lincolnshire Flood Risk and Water Management Strategy. The purpose of the strategy is to increase the safety of people across Lincolnshire by reducing the number of people at risk of flooding, increasing the resilience of local communities and reducing the impact of flooding.

The original strategy was developed through public and stakeholder consultation during 2011 and 2012 and was fully revised and updated during 2018 and 2019. This is part 3 of the strategy – the action plan. It sets out the planned improvement schemes and maintenance work activities that Risk Management Authorities intend to do in partnership, to help achieve the overall aims of the strategy. These joint actions form the common works programme set out in this document. The action plan will be updated annually and will include key organisational, management and business actions, in addition to the physical works on site contained in the common works programme.

Where possible, the action plan seeks to identify activities that are planned to commence in the current financial year i.e April 2021-March 2022, and those where completion extends into future years. However, because the action plan will be updated to take account of issues that emerge within the 2021-2022 year, actions identified are provisional, and may be subject to change. In addition to those

identified schemes it should be noted that investigation works are being undertaken by Risk Management Authorities on potential future schemes which, if progressed in year will be captured and recorded in subsequent updates to this programme.

2 Risk-based prioritisation

When determining our priorities and actions, the Lincolnshire Flood Risk and Water Management Partnership will direct its resources to areas where there is the greatest need, and where investment will bring the greatest benefits. However, demand for schemes and works is always likely to exceed resource, so we must be able to clearly define which work has the highest priority.

The most important priority will always be minimising risk to human life, followed by risk to health, critical infrastructure, property, businesses including agriculture, and the environment. These are key factors in the National Flood Risk and Coastal Erosion Management Strategy and the partnership will work within this framework when prioritising flood risk management measures in Lincolnshire. This has been the approach used to develop this action plan for 2021-22.

The type of action that will be undertaken to manage flood risk and drainage will depend on the severity of the risk in each circumstance, including factors such as the likelihood of flooding, the level of danger posed by flooding, its impacts and the physical and economic feasibility of implementing a specific scheme or activity.

3 Funding

Funding for flood risk management comes from a range of sources, including national funding from the Department for the Environment, Food and Rural Affairs (Defra), via the Environment Agency, from the Ministry of Housing, Communities and Local Government, and locally from the county council, internal drainage boards and district councils. Water and sewerage companies also invest in works which have a significant impact on managing flood risk.

National funds for works, known as 'Grant in Aid', will be maximised, and are allocated according to a national formula that uses a range of different criteria to establish the relative priority of schemes, and thereby to establish how much national funding each scheme can attract. This formula now provides for contributions of local funds to enable the allocation of some national funding to schemes that might not previously have attracted any, but it does mean that fewer schemes will now be fully funded from this source.

Funds raised by internal drainage boards and district councils are generally spent within their own areas, while government funding direct to the county council is allocated across Lincolnshire to discharge its duties as Lead Local Flood Authority. Funding provided by the Government to the Environment Agency is allocated at regional level by the regional flood and coastal committee. This is also true of funds raised locally (called 'Local Levy') and provided to the Environment Agency by the

county council. Other county council funds provided for flood risk management are allocated and spent within the county.

4 The action plan, including the common works programme

This action plan includes schemes, works and other initiatives undertaken by Risk Management Authorities across Lincolnshire. Many of these activities are already the responsibility of individual organisations, such as the maintenance of an organisation's own assets, or the fulfilment of particular legal obligations.

In some cases, two or more authorities have come together through the Lincolnshire partnership to deliver work that would not have been possible, or would have taken longer to achieve, if undertaken by one organisation alone.

These works form the common works programme.

5 Programme delivery

This programme will be refreshed annually (with an option to provide a 6 monthly programme update) and all Risk Management Authorities will retain the maximum flexibility to respond to schemes and works needs as they arise.

By combining resources, partners have been able to attract inward investment at a national level and raise the priority of proposed schemes regionally.

6 Partner organisations

Partner organisations include:

- The Environment Agency
- Lincolnshire County Council
- West Lindsey District Council
- East Lindsey District Council
- City of Lincoln Council
- North Kesteven District Council
- South Kesteven District Council
- Boston Borough Council
- South Holland District Council
- Scunthorpe and Gainsborough Water Management Board
- Trent Valley IDB

- Ancholme IDB
- North East Lindsey IDB
- Lindsey Marsh DB
- Witham First District IDB
- Upper Witham IDB
- Witham Third IDB
- Witham Fourth District IDB
- Black Sluice IDB
- Welland & Deepings IDB
- South Holland IDB
- North Level IDB
- King's Lynn IDB
- Anglian Water
- Severn Trent Water
- Anglian (Northern) RFCC

7 2021-2022 common works programme

This common works programme provides an overview of planned flood risk and drainage management works, from all inundation sources, to be carried out across Lincolnshire by relevant Risk Management Authorities, commencing 1st April 2021. This information is provisional, and is subject to availability of funding and other resources, and possible changes in priorities during the period.

7.1 Joint programme of work attracting Government grant in aid and partnership funding

| Work name | Lead Risk Management Authority <i>(Other Risk Management Authority partners involved)</i> | Flood risk source | Planned delivery (years) |
|---------------------------------------|--|-------------------|--------------------------|
| Asset recondition programme | Environment Agency | Main rivers | 2013-2022 |
| Boston Barrier works | Environment Agency <i>(Lincolnshire Lead Local Flood Authority, Boston Borough Council, Black Sluice and Witham 4th Internal Drainage Boards)</i> | Sea | 2013-2022 |
| Flood risk mapping | Environment Agency <i>(All Risk Management Authorities)</i> | All | 2013-2022 |
| Bridges replacement and refurbishment | Environment agency <i>(All Risk Management Authorities)</i> | All | 2013-2022 |

| Work name | Lead Risk Management Authority <i>(Other Risk Management Authority partners involved)</i> | Flood risk source | Planned delivery (years) |
|---|---|-------------------|--------------------------|
| Area incident room improvements | Environment Agency <i>(All Risk Management Authorities)</i> | All | 2013-2022 |
| Saltfleet to Gibraltar Point Beach Management | Environment Agency <i>(Lincolnshire Lead Local Flood Authority, East Lindsey District Council, Lindsey Marsh Drainage Board)</i> | Sea | 2021-2026 |
| Enhancing Lincolnshire coast | Environment Agency <i>(Lincolnshire Lead Local Flood Authority, East Lindsey District Council, Lindsey Marsh Drainage Board)</i> | Sea | 2021-2035 |
| Swaton Resilience Scheme | Environment Agency <i>(Black Sluice Internal Drainage Board, North Kesteven District Council, Anglian Water)</i> | Main rivers | 2014-2021 |
| Boston upstream tidal System | Environment Agency <i>(Lincolnshire Lead Local Flood Authority, Witham 4th Internal Drainage Board)</i> | Sea | 2019-2022 |
| Boston Haven Banks Flood Defence Scheme | Environment Agency <i>(Lincolnshire Lead Local Flood Authority, Witham 4th Internal Drainage Board)</i> | Sea | 2016-2021 |

| Work name | Lead Risk Management Authority <i>(Other Risk Management Authority partners involved)</i> | Flood risk source | Planned delivery (years) |
|--|---|-------------------|--------------------------|
| Lincoln defences | Environment Agency <i>(Lincolnshire Lead Local Flood Authority, Upper Witham Internal Drainage Board)</i> | Main rivers | 2016-2021 |
| Lincoln Washlands control panel | Environment Agency <i>(Lincolnshire Lead Local Flood Authority, Upper Witham Internal Drainage Board)</i> | Main rivers | 2019-2021 |
| Gibraltar Point to Freiston Shore System Sustain Project | Environment Agency <i>(Lincolnshire Lead Local Flood Authority, East Lindsey District Council, Lindsey Marsh Drainage Board)</i> | Main rivers | 2021-2023 |
| River Rase - Sustain Project | Environment Agency <i>(Lincolnshire Lead Local Flood Authority, West Lindsey District Council, Ancholme Internal Drainage Board)</i> | Main rivers | 2021-2026 |
| River Slea Flood Resilience Project | Environment Agency <i>(Lincolnshire Lead Local Flood Authority, Witham 1st Internal Drainage Board)</i> | Main rivers | 2021-2026 |

| Work name | Lead Risk Management Authority <i>(Other Risk Management Authority partners involved)</i> | Flood risk source | Planned delivery (years) |
|--|---|-------------------|--------------------------|
| Wainfleet Flood Resilience Scheme | Environment Agency <i>(Lindsey Marsh Drainage Board, Lincolnshire Lead Local Flood Authority, East Lindsey District Council)</i> | Main rivers | 2021-2023 |
| Lower Witham Flood Resilience Project | Environment Agency <i>(Lincolnshire Lead Local Flood Authority, Witham 1st, 3rd & 4th Internal Drainage Boards; Black Sluice Internal Drainage Board)</i> | Main rivers | 2021-2027 |
| Crowland and Cowbit Washes (Welland flood banks) refurbishment | Environment Agency <i>(Lincolnshire Lead Local Flood Authority, Welland & Deepings Internal Drainage Board)</i> | Main rivers | 2021-2026 |
| River Steeping Enhanced catchment programme | Environment Agency & Lindsey Marsh Drainage Board <i>(Lincolnshire Lead Local Flood Authority, East Lindsey District Council)</i> | Main rivers | 2017-2022 |
| River Steeping dredging | Lindsey Marsh Drainage Board (Environment Agency, East Lindsey District Council) | Main rivers | 2020-2021 |

| Work name | Lead Risk Management Authority <i>(Other Risk Management Authority partners involved)</i> | Flood risk source | Planned delivery (years) |
|--|---|---|--------------------------|
| South Lincolnshire Water Management Partnership initiatives | Lincolnshire Lead Local Flood Authority <i>(Environment Agency, Anglian Water, Black Sluice IDB, Welland & Deepings IDB)</i> | Lowland ordinary watercourses | 2020-2023 |
| Spalding, Acacia Avenue | South Holland IDB <i>(Lincolnshire Lead Local Flood Authority)</i> | Lowland ordinary watercourses | 2020-2023 |
| Culverted watercourse lining in Boston | Witham 4th District Internal Drainage Board <i>(Lead Local Flood Authority)</i> | Lowland ordinary watercourses | 2016-2022 |
| Trusthorpe pumping station refurbishment | Lindsey Marsh Drainage Board <i>(Environment Agency)</i> | Lowland ordinary watercourses and main rivers | 2021-2022 |
| Saltfleet pumping station refurbishment (incorporating EA Black Gowt outfall) | Lindsey Marsh Drainage Board <i>(Environment Agency)</i> | Lowland ordinary watercourses | 2019-2023 |
| LMDB, EA PSCA - recovery works - embankment repairs to Great Eau, Long Eau, Greyfleet Drain and River Steeping | Lindsey Marsh Drainage Board <i>(Environment Agency)</i> | Main rivers | 2020-2021 |
| Culverts at Thorpe culvert | Lindsey Marsh Drainage Board <i>(Environment Agency, Witham 4th Internal Drainage Board)</i> | Main Rivers, lowland ordinary watercourses | 2020-2022 |

| Work name | Lead Risk Management Authority <i>(Other Risk Management Authority partners involved)</i> | Flood risk source | Planned delivery (years) |
|---|---|--|--------------------------|
| Billinghay pumping station refurbishment | Witham First District IDB <i>(Environment Agency)</i> | Lowland ordinary watercourses | 2020-2021 |
| SFF Upper Catchment natural flood management and control analysis | Black Sluice IDB <i>(Environment Agency)</i> | Lowland ordinary watercourses | 2020-2021 |
| Binbrook – Louth Road | East Lindsey District Council <i>(Lindsey Marsh Drainage Board, Anglian Water, Lincolnshire Lead Local Flood Authority)</i> | Lowland ordinary watercourses, groundwater | 2021-2022 |
| Scopwick , groundwater flood risk investigations, improvement options and potential works | Lincolnshire Lead Local Flood Authority <i>(Anglian Water, North Kesteven District Council, Witham 1st Internal Drainage Board)</i> | groundwater | 2020-2022 |
| The Gride, Boston | Witham 4th Internal Drainage Board <i>(Lincolnshire Lead Local Flood Authority)</i> | Lowland ordinary watercourses | 2020-2022 |
| The Fodderdyke, Midville | Witham 4th Internal Drainage Board <i>(Lincolnshire Lead Local Flood Authority)</i> | Lowland ordinary watercourses | 2020-2022 |
| Goosemuck Lane, Sibsey | Witham 4th Internal Drainage Board <i>(Lincolnshire Lead Local Flood Authority)</i> | Lowland ordinary watercourses | 2021-2022 |

| Work name | Lead Risk Management Authority <i>(Other Risk Management Authority partners involved)</i> | Flood risk source | Planned delivery (years) |
|--|---|-------------------------------|--------------------------|
| | <i>Flood Authority) Anglian Water Services, Private Landowners</i> | | |
| Wrangle pumping station refurbishment, Wrangle | Witham 4th Internal Drainage Board <i>Environment Agency , Private Landowners</i> | Lowland ordinary watercourses | 2021-2023 |
| Capital main drain dredging, Witham Fourth catchment | Witham 4th Internal Drainage Board <i>Environment Agency , Private Landowners</i> | Lowland ordinary watercourses | 2021-2027 |
| Telemetry upgrade, Witham Fourth catchment | Witham 4th Internal Drainage Board <i>Environment Agency , Private Landowners</i> | Lowland ordinary watercourses | 2021-2022 |
| Whaplode - Millgate | South Holland IDB <i>(Lincolnshire Lead Local Flood Authority)</i> | Lowland ordinary watercourses | 2021-2022 |
| Gedney Drove End | South Holland IDB <i>(Lincolnshire Lead Local Flood Authority, Anglian Water)</i> | Lowland ordinary watercourses | 2021-2022 |
| North Scarle - Eagle Road flood relief | Trent Valley Internal Drainage Board <i>(Lincolnshire Lead Local Flood Authority, Developer)</i> | Lowland ordinary watercourses | 2020-2021 |

7.2 Joint programme of annual core activities

| Description of activities | Risk Management Authority | Flood risk source |
|--|---------------------------|---------------------|
| Minor improvements to assets: <ul style="list-style-type: none"> • Feasibility studies and scheme appraisal; • Detailed design and procurement of contracts and materials etc; and • Delivery of works. | Environment Agency | Main rivers and sea |
| Routine maintenance of assets: <ul style="list-style-type: none"> • Asset condition inspection; • System monitoring and operation; • Maintaining structures; • Grass cutting (hand or mechanical); • Weed control (mechanical and chemical); • Pest, and vermin control and tree works; • Defence repairs; • Work on flood storage reservoirs; • Obstruction removal and debris clearance from rivers; • De silting and dredging; • Pumping operations; • Control of river water levels and flows on main rivers; • Consenting and enforcement; • Flood bank and channel reprofiling and reinstatement; and • Environmental management. | Environment Agency | Main rivers and sea |
| Emergency incidents, response and recovery: | Environment Agency | Main rivers and sea |

| | | |
|--|--|--|
| <ul style="list-style-type: none"> • Issue flood warnings; • Raise awareness amongst staff and site operatives; • Monitor rainfall and water levels across Lincolnshire; • Liaise with other Risk Management Authorities and emergency services; • Implement pre-determined emergency response plans; • Pre-plan resources and deploy staff and equipment; • Open control rooms and manage and respond to incidents; and • Work with partners on single agency and multi-agency responses. | | |
|--|--|--|

| Description of activities | Risk Management Authority | Flood risk source |
|--|---|--|
| <p>Minor improvements to assets:</p> <ul style="list-style-type: none"> • Replacement or installing of linear drainage units, chambers, covers, drain pipes and surface water sewers; • Connections with new or existing installations; • Replacement or installing of pipes outfalls to ditches, combination drainage units; and • Undertake drainage system studies and CCTV investigations • Minor works to prevent surface water flooding | Lincolnshire Lead Local Flood Authority | Surface water, groundwater and flooding from ordinary watercourses |
| <p>Routine maintenance of assets:</p> <ul style="list-style-type: none"> • Cleaning and jetting of gullies; • Drainage channel clearing; • Manhole maintenance; • Watercourse cleansing; • Inspection and maintenance of bridges and culverts; • Catchpit cleansing; and • Grip cutting and clearing | Lincolnshire Lead Local Flood Authority | Surface water, groundwater and flooding from ordinary watercourses |

| | | |
|--|--|---|
| <p>Emergency incidents, response and recovery:</p> <ul style="list-style-type: none"> • Raise awareness within organisations and with alliance partners; • Implement pre-determined emergency response plans; • Pre-plan resources and deploy staff and equipment; • Work with partners and emergency services on single agency and multi-agency responses; and • Open control rooms and manage and respond to incidents. | <p>Lincolnshire Lead Local Flood Authority</p> | <p>Surface water, groundwater and flooding from ordinary watercourses</p> |
| <p>Description of activities</p> | <p>Risk Management Authority</p> | <p>Flood risk source</p> |
| <p>Repair, refurbishment and replacement of assets (including minor improvements):</p> <ul style="list-style-type: none"> • Feasibility studies and scheme appraisal; • Detailed design and procurement of contracts and materials etc; and • Delivery of works. | <p>Internal Drainage Boards</p> | <p>Lowland ordinary watercourses</p> |
| <p>Routine maintenance of assets:</p> <ul style="list-style-type: none"> • Bridge and culvert inspections and cleansing; • Removal of debris and blockages; • Bank mowing by machine and by hand; • Mechanical and hand weed clearance from channels; • Chemical weed control; • Bush and tree clearance; • Silt removal from channels and culverts; • Operation and maintenance of pumping stations, outfalls and sluices; • Asset inspections and condition assessments; • Consenting and enforcement; • Reforming of watercourse banks and slip repairs; and | <p>Internal Drainage Boards</p> | <p>Lowland ordinary watercourses</p> |

| | | |
|---|--------------------------|--|
| <ul style="list-style-type: none"> Control of lowland ordinary watercourse water levels within district. | | |
| <p>Land Drainage Act management;</p> <ul style="list-style-type: none"> Consenting and enforcing of culverts, weirs, structures etc on board maintained and also riparian owned ordinary watercourses Enforcement in order to maintain flows on board maintained and all riparian owned ordinary watercourses | Internal Drainage Boards | All non main river watercourses in existing IDB areas and extended areas throughout the county |
| <p>Emergency incidents, response and recovery:</p> <ul style="list-style-type: none"> Raise awareness amongst staff and site operatives; Monitor rainfall and water levels within the drainage district; Liaise with other Risk Management Authorities; Implement pre-determined emergency response plans; Pre-plan resources and deploy staff and equipment; Open control rooms and manage and respond to incidents; and Work with partners and emergency services on single agency and multi-agency responses. | Internal Drainage Boards | Lowland ordinary watercourses |

| Description of activities | Risk Management Authority | Flood risk source |
|--|---------------------------|-----------------------------------|
| <p>Major and minor improvements to assets:</p> <ul style="list-style-type: none"> Investigation of root cause; Feasibility studies and scheme appraisal; | Water companies | Public and transferred sewers and |

| | | |
|---|-----------------|--|
| <ul style="list-style-type: none"> • Detailed design through in house and contract resource; • Delivery of works; and • Provision of new assets. | | drains |
| <p>Routine maintenance of assets:</p> <ul style="list-style-type: none"> • Asset condition inspection; • Monitoring and response to telemetered assets; • Maintenance of sewers; • Maintenance of pumping stations; • Maintenance of sewage treatment works; • Reactive response to issues arising from public assets; and • Maintenance of adopted flood storage reservoirs and structures. | Water companies | Public and transferred sewers and drains |
| <p>Emergency incidents, response and recovery:</p> <ul style="list-style-type: none"> • Resilience focused response; • Response to sewage and water related incidents; • Raise awareness amongst staff and site operatives; • Liaise with other Risk Management Authorities and emergency services; • Plan resources and deploy staff and equipment; • Open Incident room and manage and respond to incidents; and • Work with partners on single agency and multi-agency responses. | Water companies | Public and transferred sewers and drains |

| Description of activities | Risk Management Authority | Flood risk source |
|--|-------------------------------------|---|
| <p>Minor improvements and maintenance of assets:</p> <ul style="list-style-type: none"> • Undertake works on ordinary watercourses and liaise with riparian owners • Bridge and culvert inspections and cleansing; • Removal of debris and blockages; • Silt removal from channels and culverts; | District, borough and city councils | Surface water, groundwater and flooding from ordinary |

| | | |
|--|-------------------------------------|--|
| <ul style="list-style-type: none"> • Asset inspections and condition assessments; and • Operation and maintenance of pumping stations, outfalls and sluices. | | watercourses |
| <p>Emergency incidents, response and recovery:</p> <ul style="list-style-type: none"> • Raise awareness amongst staff and site operatives; • Monitor rainfall and water levels within the district; • Liaise with other Risk Management Authorities; • Implement pre-determined emergency response plans; • Pre-plan resources and deploy staff and equipment; • Open control rooms and manage and respond to incidents; and • Work with public, partners and emergency services on single agency and multi-agency responses. | District, borough and city councils | Surface water, groundwater and flooding from ordinary watercourses |

8 Find Out More

[Read more about this strategy.](#)

Hard copies are available on request. Postal enquiries should be sent to:

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