



County Offices
Newland
Lincoln
LN1 1YL

18 February 2016

Flood and Drainage Management Scrutiny Committee

A meeting of the Flood and Drainage Management Scrutiny Committee will be held on **Friday, 26 February 2016 at 10.00 am in Committee Room One, County Offices, Newland, Lincoln LN1 1YL** for the transaction of the business set out on the attached Agenda.

Yours sincerely

A handwritten signature in black ink, appearing to be 'Tony McArdle', written over a horizontal line.

Tony McArdle
Chief Executive

Membership of the Flood and Drainage Management Scrutiny Committee **(11 Members of the Council and 7 Other Voting Members)**

Councillors C L Strange (Chairman), Mrs V C Ayling (Vice-Chairman), A M Austin, C J T H Brewis, A Bridges, M Brookes, R G Fairman, J R Marriott, C R Oxby, C Pain and R A Renshaw

Other Voting Members

District Councillors: R Austin, Boston Borough Council
I G Fleetwood, West Lindsey District Council
D Jackson, City of Lincoln Council
Mrs F M Martin MBE, East Lindsey District Council
J Money, North Kesteven District Council
B Russell, South Kesteven District Council
M D Seymour, South Holland District Council

**FLOOD AND DRAINAGE MANAGEMENT SCRUTINY COMMITTEE AGENDA
FRIDAY, 26 FEBRUARY 2016**

Item	Title	Pages
1	Apologies/Replacement Members	
2	Declarations of Members' Interests	
3	Minutes of the previous meeting of the Flood and Drainage Management Scrutiny Committee held on 11 December 2015	5 - 14
4	Announcements by the Executive Councillor, Economic Development, Environment, Planning and Tourism and Senior Officers (Economy and Place)	Verbal Report
5	Anglian Water Planning Engagement Update <i>(To receive a report from Allan Simpson (Planning Services Manager), which provides the Committee with an update on the involvement of Anglian Water in Planning Applications)</i>	15 - 16
6	Environment Agency Update <i>(To receive a report from Deborah Campbell (Environment Agency), which outlines progress made on implementing flood alleviation schemes for Louth and Horncastle; and an update on the Boston Barrier, the River Steeping and the River Welland Navigation)</i>	17 - 28
7	Investigations held under Section 19 of the Flood and Water Management Act 2010 <i>(To receive a report from Mark Welsh, (Flood Risk and Development Manager), which provides the Committee with the latest position of all current Section 19 investigations in the County under Section 19 of the Flood and Water Management Act 2010)</i>	29 - 46
8	Greater Lincolnshire Local Enterprise Partnership (GLLEP) Water Management Plan & Coastal Vision <i>(To receive a report from David Hickman (Environment Commissioner), which provides the Committee with details of the Water Management Plan and an update on progress towards the coastal vision)</i>	47 - 76
9	Flood and Drainage Management Scrutiny Committee Work Programme <i>(A report from Daniel Steel (Scrutiny Officer), in connection with the latest position with regard to the Committee's Work Programme)</i>	77 - 82

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Please note: for more information about any of the following please contact the Democratic Services Officer responsible for servicing this meeting

- Business of the meeting
- Any special arrangements
- Copies of reports

Contact details set out above.

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www.lincolnshire.gov.uk/committeerecords



**FLOOD AND DRAINAGE
MANAGEMENT SCRUTINY
COMMITTEE
11 DECEMBER 2015**

PRESENT: COUNCILLOR C L STRANGE (CHAIRMAN)

Councillors Mrs V C Ayling (Vice-Chairman), A M Austin, C J T H Brewis, A Bridges, M Brookes, R G Fairman, J R Marriott, C R Oxby, C Pain and R A Renshaw.

District Councillors: R Austin (Boston Borough Council), I G Fleetwood (West Lindsey District Council), Mrs F M Martin MBE (East Lindsey District Council), B Russell (South Kesteven District Council), M D Seymour (South Holland District Council), I Carrington (North Kesteven District Council) and B Charlesworth (City of Lincoln Council).

External Agencies –

P Bateson (Chief Executive of the Witham Fourth District Internal Drainage Board), Deborah Campbell (Environment Agency), District Councillor J Summers (Leader of West Lindsey District Council), R Caudwell (Chairman of the South Forty Foot Drain Steering Group, Keith Casswell (Chairman of the Black Sluice Internal Drainage Board), Stafford Proctor (The Wash Frontages Group) and Ian Warsap (Chief Executive of the Black Sluice Internal Drainage Board).

C J Davie (Executive Councillor for Economic Development, Environment, Planning and Tourism) and S M Tweedale (Executive Support Councillor for Economic Development, Planning and Tourism) attended the meeting as observers.

Officers in attendance:-

Katrina Cope (Senior Democratic Services Officer), Simon Evans (Health Scrutiny Officer), Andrew Jee (Project Manager), Daniel Steel (Scrutiny Officer), Mark Welsh (Flood Risk and Development Manager) and Richard Wills (Executive Director for Environment and Economy).

23 APOLOGIES/REPLACEMENT MEMBERS

Apologies from absence were received from Councillors D Jackson (Lincoln City Council) and J F Money (North Kesteven District Council).

It was noted that Councillors B Charlesworth (Lincoln City Council) and I Carrington had replaced Councillors D Jackson (Lincoln City Council) and J F Money (North Kesteven District Council) respectively, for this meeting only.

24 DECLARATIONS OF MEMBERS' INTERESTS

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Note: Some Committee members wished the following interests to be noted:-

Councillor M Brookes – Member of the Black Sluice Internal Drainage Board and Witham Fourth Internal Drainage Board.

Councillor C J T H Brewis – Member of the North Level Internal Drainage Board.

Councillor M D Seymour - Member of the South Holland Internal Drainage Board and North Level Internal Drainage Board.

Councillor R Austin – Member of Witham Fourth Internal Drainage Board and Black Sluice Internal Drainage Board.

Councillor B Russell – Member of the Black Sluice Internal Drainage Board.

25 MINUTES OF THE PREVIOUS MEETING OF THE FLOOD AND DRAINAGE MANAGEMENT SCRUTINY COMMITTEE HELD ON 4 SEPTEMBER 2015

RESOLVED

That the Minutes of the Flood and Drainage Management Scrutiny Committee meeting held on 4 September 2015 be agreed as a correct record and signed by the Chairman, subject to Minute No 13 – Declarations of Members' Interests on page two having the interests of Councillor D Seymour inserted as being a member of North Level Internal Drainage Board and South Holland Internal Drainage Board.

26 ANNOUNCEMENTS BY THE EXECUTIVE COUNCILLOR, ECONOMIC DEVELOPMENT, ENVIRONMENT, PLANNING AND TOURISM AND SENIOR OFFICERS (ECONOMY AND PLACE)

Councillor C J Davie, the Executive Councillor for Economic Development, Environment, Planning and Tourism advised the Committee that there was nothing to report at this present time.

27 WRANGLE SEA BANKS

The Chairman invited Peter Bateson, Chief Executive of the Witham Fourth District Internal Drainage Board to present to the Committee, the Wrangle Sea Banks Scheme.

Details of the Scheme were appended to the Report at Appendix A.

It was reported that the objective of the scheme was to raise and re-profile the sea defences to keep pace with climate change. The scheme included contributions of up to 40 metres of farmland to provide the spoil to be used to re-profile the banks.

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The Committee were guided through Appendix A to the report 'Capital Works Programme – Wrangle Sea Banks' from which reference was made to the following:-

- Details of the work to be undertaken to the sea defences near Wrangle where land had been identified as being the lowest along the Wash frontage;
- The Committee were advised that landowners who farmed behind the sea defences would be contributing up to 40 metres of grade one farmland to provide the spoil to re-profile the sea banks, as the use of traditional borrow pits were not currently possible due to the Wash status being a site of Special Scientific Interest (SSSI);
- The fact that Witham Fourth Internal Drainage Board was leading on the project had enabled local contractors to be used. It was highlighted that the partnership approach together with a number of households protected had enabled an application to be made for Department for Environment, Food & Rural Affairs (DEFRA) funding. The Committee were advised that the project had already had indicative approval for inclusion in the six year investment programme. The work would take place over three financial years from 2015/16 to 2017/18;
- The re-profiled sea banks would be constructed to have a shallow sloped rear face, which would lead to a soak dyke to cope with any future over topping. The construction would also provide for some wildlife habitation; and
- The cost of the scheme was £600,000. The scheme would protect 463 properties that were at risk, several businesses and 340 hectares of prime agricultural land.

A discussion ensued, from which the following issues were raised:-

- The necessity for the scheme as it was very important to protect farmland for the future. Some discussion was had as to whether borrow pits should be used, as some members felt that the value of the farmland land for growing was very important also. A question was asked if there was a breach of the single bank how far the water would travel in a two hour period. The Committee were advised a test breach scenario had shown that the water had gone for hundreds of metres, as far as the A52. The Committee were advised further that the re-profiling of the bank (1 in 4 slope) would allow for over topping without destroying the bank;
- It was asked whether contributions should be requested from residents affected. The Committee were advised that properties paid drainage rates, therefore everyone contributed to such a scheme, with funding from the Environment Agency, DEFRA and the Drainage Board; and
- The vulnerability of the East Coast. The Committee noted that discussions were ongoing with MP's and the Greater Lincolnshire Local Enterprise Partnership, and that a good case was being made for Lincolnshire, with regard to the Coastal Economy and food production. The Committee agreed to send a letter to the Executive Councillor for Economic Development, Environment, Planning and Tourism expressing their support to the scheme and the importance of protecting the coast.

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The Chairman invited Stafford Proctor from the Wash Frontages Group to address the Committee.

The Committee were advised that the Wash Frontages Group was a grass roots organisation who acted as a facilitator, and enabler of improvements to the flood defences around the Wash to protect people, towns, businesses, farming and food production.

The short verbal presentation made reference to:-

- The need to protect the fens as some 650,000 lived and worked there. It was also highlighted that the area was the major centre for food production and processing in the UK, and was therefore vital for food supply and employment;
- That tidal surge had increased from 1953 to 2013. The Committee were advised of the tidal surge levels at Boston frontage, they were as follows: 31 Jan 1953 5.20m; 11 Jan 1978 5.49m; and 5 Dec 2014 6.00m;
- That the group was working in partnership with all agencies to help improve coastal and river flood defences, as highlighted in the Wash Banks Performance Review 2012. The need to source funding for the improvements required; and
- The importance of the 5.4km flood defence improvement scheme at Wrangle, north of Boston, the first major improvement to coastal flood defences for over 30 years.

During discussion, the following points were raised:-

- That there was no evidence that accretion was taking place within the Wash; and
- The availability of the Wash Banks Performance Review 2012 Report. The Committee were advised that Deborah Campbell (Environment Agency) would let Officers have a copy of the Executive Summary from the report to be forwarded on to members of the Committee.

In conclusion, the Committee gave their full support to the Wrangle Sea Banks Scheme.

RESOLVED

1. That support be given by the Flood and Drainage Management Scrutiny Committee to the Wrangle Sea Banks Scheme.
2. That a letter be sent by the Chairman, Councillor C L Strange to the Executive Councillor for Economic Development, Environment, Planning and Tourism expressing the Flood and Drainage Management Scrutiny Committee's support to the Wrangle Sea Banks Scheme; and to the importance of protecting the coast.

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The Committee gave consideration to a report from Phil Younge, Area Manager Lincolnshire and Northamptonshire, Environment Agency, which provided a progress report on implementing flood alleviations schemes for Louth and Horncastle.

Deborah Campbell (Environment Agency) guided the Committee through the report making particular reference to:-

Louth Alleviation Scheme update

It was reported that Louth was a 'rapid response' catchment which was situated on the River Lud with a low protection of flooding. The Committee was advised that a partnership approach to funding was adopted by all organisations to build two flood storage reservoirs to reduce flood risk to homes and businesses in Louth.

The Committee were advised further that work had commenced on site in July 2015, and was progressing as planned, with the control structures at both sites nearing completion. It was reported that culverts had been installed on the south site and that work to the earth embankment on the north side was 33% completed. It was highlighted that the clay material at the Louth sites was enabling the two schemes to progress according to the programme, but there remained a risk of delay due to the inclement weather. It was however hoped that the works would be completed in 2016.

It was highlighted that the site had received visits from the members of Louth Town Council and from students from a local secondary school to observe progress being made on the scheme.

Horncastle Alleviation Scheme Update

The Committee were advised that the Horncastle site was situated on the confluence of the rivers Bain and Waring, and that flooding occurred as a result of high flows in both watercourses. The scheme would build a flood storage reservoir on the River Bain and individual property protection for those at risk from the River Waring.

It was reported that work had started on site in July 2015. However due to archaeological investigations at Horncastle; and the type of material at the site, construction of the main earthworks had stopped for the winter period, but work was continuing on the control structure. As a result of these factors and the wet weather there was a delay of 2/3 months to the programme.

The Committee were advised that the Horncastle site had also received visits from Town and Parish Councils to see how the scheme was progressing.

The Committee were also advised that agreements with landowners were nearing completion and that some advance payments had been made.

The East Lindsey District Council representative advised the Committee that work was progressing well and that all parties were working well together on site. It was

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also reported that the findings of the archaeological investigations had been very interesting.

The Committee were advised that the scheme would be finished for the summer of 2016.

RESOLVED

That the progress made towards implementing flood alleviation schemes for Louth and Horncastle be noted.

29 BOSTON BARRIER UPDATE

Consideration was given to a report from the Environment Agency, which provided the Committee with an update with regard to the Boston Barrier.

Deborah Campbell from the Environment Agency advised that the Boston Barrier project remained on track to be completed by December 2019. Extensive work was currently being undertaken to produce the relevant documents needed to support the Transport and Works Act Order application to the Government in the Spring of 2016. The Committee were advised that the Environmental Statement for the scheme was expected to go out to consultation with statutory consultees in January 2016.

The Environment Agency had also started the process to appoint a supplier for the design and build contract for the Boston Barrier for 2016. It was noted that the detailed design work would commence once the Transport and Work Act Oder had been submitted. It was hoped that construction would start in 2017 following a successful Transport and Works Order application.

The Committee were advised that currently a series of public exhibitions were being held in Boston to launch new information and consult with local people about any impact arising from the proposed contraction methods. It was reported that over 150 people had attended the consultation events so far.

Members of the Committee were invited to watch a new computer generated animation showing the Boston Barrier Scheme in more detail.

During questions, the Committee raised the following issues:-

- An expression of thanks was extended to Environment Agency staff at the drop in point for all their patience and support;
- The need to ensure that a reassuring message was communicated to the general public about the scheme. The Committee was advised that some issues had come forward and they were the tidal surge through Boston, the effect the barrier would have on the fishing fleet; and protection for the industrial estate. Communication played a vital part in getting local people on board with the scheme. The Committee was advised that the Environment Agency and Boston Borough Council were working together doing lots of engagement sessions and on-line updates. Reassurance was given at the

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meeting by the Environment Agency representative that the fishing fleet would be able to operate as normal, and that the industrial estate at Marsh Lane would have no adverse effect from tidal surge;

- Timescale for the Transport and Works Act Order – The Committee was advised that the draft would be in for March 2016, if all went to plan the project would then commence in 2017; and
- Life expectancy of the barrier. It was reported that the barrier had a life expectancy of one hundred years. One member enquired regarding the hydraulic cylinders being open to the elements would have an effect on the barrier. Officers agreed to relay concerns on to the project team.

The Committee welcomed the update on the Boston Barrier.

RESOLVED

That the Boston Barrier update be noted.

30 BLACK SLUICE CATCHMENT

The Chairman welcomed to the meeting Ian Warsap, Chief Executive of the Black Sluice Internal Drainage Board, Keith Casswell, Chairman of the Black Sluice Internal Drainage Board and Robert Caudwell, Chairman of the South Forty Foot Drain Steering Group.

The Committee received an introduction from the Chief Executive of the Black Sluice Internal Drainage Board, which advised of the joint position statement on the future development of the Black Sluice Catchment flood risk management proposals following a six week consultation to look at how flood risk could be managed better in the future.

It was reported that the Environment Agency (EA) and the Black Sluice Internal Drainage Board (BSIDB) had identified some key points (full details were shown on page 27 of the report), and as a result both parties had agreed to move forward jointly.

The Committee were advised that the South Forty Foot Catchment Steering Group had been established, to which Robert Caudwell had been appointed as an Independent Chairman, to ensure continued dialogue between all risk management authorities and other organisations and individuals who had offered to assist in shaping the future flood risk management and sustainable development of the Black Sluice Catchment. This would then allow the EA to act as an equal partner rather than lead.

Representation on the group would comprise of representatives from BSIDB, EA, Lincolnshire County Council (LCC) and the Greater Lincolnshire Local Enterprise Partnership. The Steering Group would be focussing on four main areas for development. These were:-

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- Catchment wide asset management for land drainage and flood risk management;
- Water Resource;
- Water Level Management and Navigation; and
- Water Framework Directive.

Further details relating to each of the four development areas was detailed on pages 28/29 of the report presented.

It was highlighted that Lincolnshire was leading the way in this respect, as this way of proposed partnership working was a first locally and nationally.

The Committee were advised that the Group would be looking at good practice across the world to come up with solutions to the five development areas.

The Executive Councillor was delighted with the agreed solution, as a collective voice would help to find funding opportunities.

Members welcomed the joint approach being taken and invited the team to come back to the Committee with periodic updates.

RESOLVED

That the update on the Black Sluice Catchment be noted.

**31 COMMON WORKS PROGRAMME & LINCOLNSHIRE COUNTY COUNCIL
CAPITAL SCHEMES 2015-16**

The Committee gave consideration to a report from Richard Wills, Executive Director for Environment and Economy, which provided an update on the latest position with regard to the Common Works Programme for 2015/16, including the current programme for surface water management schemes.

Appendix A to the report identified the latest project spend profile for the current financial year and the programme of surface water schemes that were planned.

Members noted that in line with the Lincolnshire Flood Risk and Drainage Management Partnership's policy of maintaining the greatest possible openness, the Common Works Programme for 2015/16 was published on Lincolnshire County Council's website. The policy distinguished between 'core' activities, which were those that Risk Management Authorities undertake in the normal course of their duties, and 'joint' activities which were those where two or more authorities had come together to deliver a solution.

It was noted further although the County Council's responsibility for surface water flood risk fell within the Common Works Programme, the Council had developed a programme of such works in consultation with its partners, to provide opportunities for joint working. The Committee were advised that Government funding was obtained through the Environment Agency Flood Defence Grant in Aid process, with

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schemes being assessed on a cost benefit basis with the County Council making contributions and delivering schemes.

The report advised the Committee that a business case had been submitted in December 2012 identifying a spending profile over the three years 2013/14 to 2015/16 from the County Council of £1.7m. A similar case had been submitted in June 2015 for further capital allocation for the 2016/17 financial year, with £630,000 being approved as a contribution to an indicative programme valued of just over £2m.

RESOLVED

That the actions in progress to deliver the current programme of works to manage local flood risk be noted.

32 INVESTIGATIONS UNDERTAKEN UNDER SECTION 19 OF THE FLOOD & WATER MANAGEMENT ACT 2010

The Committee gave consideration to a report from Richard Wills, Executive Director for Environment and Economy, which informed the Committee of the position of all current investigations in the County under Section 19 of the Flood and Water Management Act 2010.

A spreadsheet summarising investigations in the County under Section 19 of the Flood and Water Management Act 2010 was detailed at Appendix A to the report.

During discussion, the Committee made reference to individual properties on the list, and enquired as to what would be happening with regarding to insurance for properties situated within flood areas. The Committee were advised that currently lobbying was being undertaken with MP's to try and come up with a solution to the problem.

RESOLVED

That the report and Appendix be noted.

33 FLOOD AND DRAINAGE MANAGEMENT SCRUTINY COMMITTEE WORK PROGRAMME

Consideration was given to a report from the Executive Director with responsibility for Democratic Services, which asked the Flood and Drainage Scrutiny Committee to consider its Work Programme for the coming year. A copy of the Work Programme was detailed at Appendix A to the report presented.

The Health Scrutiny Officer invited the Committee to put forward any items for consideration by the Flood and Drainage Scrutiny Committee.

The following items were put forward:-

- An update on the Black Sluice Programme;

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- An update on the River Steeping from the Lindsey Marsh Drainage Board;
- An update on the River Welland Navigation; and
- Property Level Preventative Measures with regard to flooding – it was suggested that Mary Dhonau should be invited to speak on this matter.

Members also asked for confirmation as to whether the September meeting date was to be held on the 22 September (which was a Thursday date), or on Friday 23 September 2016. Officers agreed to confirm the 'actual' date to members of the Committee.

The Chairman also suggested that a representative from the Environment Agency that covered the Derbyshire/Nottingham/Leicester area should be invited to attend the next meeting.

RESOLVED

That the Work Programme presented be noted and updated accordingly with the suggestions as detailed above.

The meeting closed at 11.51 am

Open Report on behalf of Anglian Water Services

Report to:	Flood and Drainage Management Scrutiny Committee
Date:	26 February 2016
Subject:	Anglian Water Planning Engagement Update

Summary:

This report provides an update on Anglian Water consultation arrangements and ongoing process improvements following a previous report to the Flood and Drainage Management Scrutiny Committee on 4 September 2015 where an overview was provided to the Committee by Anglian Water on growth and its impact on infrastructure; the legislation and regulation covering the water industry and engagement in planning.

Recommendation(s):

The committee is invited to consider and comment on the report.

1. Background

Pre-planning service

Anglian Water has a pre-planning service for developers and their agents. The pre-planning service provides the customer with a report setting out infrastructure capacity in the area, any mitigation measures that would be required and high level costs for these improvements. All water and sewerage companies are monitored on their pre-planning services which are reported quarterly by Water UK.

For the current financial year we have received about 130 pre-planning enquiries from sites within the Lincolnshire County area.

Planning Applications

Anglian Water is not a statutory consultee on planning applications. We seek to provide comments on major development of 10 or more dwellings or 0.5ha for other uses. Anglian Water currently relies on Local Planning Authorities (LPAs) to send consultations through for comment and by checking weekly lists. Our records show that we have received about 170 planning application consultations from the Lincolnshire authorities since the start of the financial year.

Where development proposals propose to drain to a surface water sewer Anglian Water is sub-consulted by Lincolnshire County Council in its role as the Lead Local Flood Authority.

Process Improvements:

We are currently exploring a number of process and system improvements including:

- Trialling a system where we are notified of submitted and approved planning applications through the use of software;
- Improving Anglian Water's planning related webpages and providing communication materials for residents setting out our role in the planning system;
- Updates to our customer pre-planning portal to make it easier for developers and their agents to submit enquiries;
- Refresh to the planning application consultation template and wording to assist LPAs as part of their decision making.

2. Conclusion

This report provides an update on the Planning Engagement of Anglian Water.

3. Consultation

a) Policy Proofing Actions Required

N/A

4. Background Papers

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

This report was written by Allan Simpson, Planning Services Manager (Anglian Water Services), who can be contacted by email aSimpson2@anglianwater.co.uk

Open Report on behalf of Richard Wills, the Officer Responsible for Democratic Services

Report to:	Flood and Drainage Management Scrutiny Committee
Date:	26 February 2016
Subject:	Environment Agency Update

Summary:

Representatives from the Environment Agency will provide an update to the meeting of the Flood and Drainage Management Committee.

Actions Required:

The Committee is invited to consider and comment on the update(s) provided by the Environment Agency.

1. Background

This report provides the Committee with an agreed standing update from the Environment Agency to outline progress on implementing flood alleviation schemes for Louth and Horncastle and outline progress on work to develop a tidal flood barrier in Boston.

This report also provides an update as requested by the Committee at the last meeting on Steeping River and a briefing note on Fulney Lock (River Welland).

2. Conclusion

To consider and comment on the update(s) provided.

3. Consultation

a) Policy Proofing Actions Required

Not applicable.

4. Appendices

These are listed below and attached at the back of the report	
Appendix A	Louth and Horncastle Flood Alleviation Schemes Update Report
Appendix B	Boston Barrier Update
Appendix C	Steeping River Update
Appendix D	Fulney Lock (River Welland) – Briefing Note

5. Background Papers

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

This report was written by Daniel Steel, who can be contacted on 01522 552102 or daniel.steel@lincolnshire.gov.uk.

Policy and Scrutiny

Open Report on behalf of Environment Agency

Report to:	Flood and Drainage Management Scrutiny Committee
Date:	26 February 2016
Subject:	Louth and Horncastle Flood Alleviation Schemes

Summary:

To outline progress on implementing flood alleviation schemes for Louth and Horncastle.

Actions Required:

To consider and comment on progress made towards implementing flood alleviation schemes for Louth and Horncastle.

1. Background

Louth and Horncastle have suffered historic flooding from main rivers, most recently in 2007.

Louth is a “rapid response” catchment situated on the River Lud with a low standard of protection from flooding. The preferred flood risk management option is to build two flood storage reservoirs to reduce flood risk to homes and businesses in Louth.

Horncastle is situated on the confluence of the rivers Bain and Waring. Flooding occurs due to high flows in both watercourses. The town has a significant number of properties with a low standard of protection. Flood events have been recorded in 1920, 1960, 1981, 1993 and 2007. The preferred option is to build a flood storage reservoir on the River Bain and individual property protection for those at risk from the River Waring.

In March 2009 it was concluded that external contributions would be necessary to make any scheme viable. A partnership approach to funding was therefore adopted by; The Environment Agency, Lincolnshire County Council, East Lindsey District Council, Lindsey Marsh Drainage Board and the Witham Third Drainage Board to deliver flood storage schemes at both locations. Both Town Councils have agreed in principle to fund future maintenance of the completed schemes.

Key Information

	Louth	Horncastle
Current probability of Main River flooding in any year	5% (1in20)	10%(1in10) Bain 20%(1in5) Waring
Probability following construction works*	0.67% (1in150)	1% (1in100)
Number of properties benefiting from scheme	355	288
Estimated construction completion	August 2016	Sept 2016
Capital Cost including contingency (today's prices)**	£6.5 million	£8.2 million

* the figure quoted for annual probability of river flooding post-construction works is based on current river flows. For Louth, the probability is expected to increase to 1.25% (1in80) over the 100 year life of the scheme based on the latest climate change guidance. We have not yet undertaken the climate change calculations for Horncastle but similar changes should be expected.
 ** includes additional £430,000 acceleration funding, secured for potential Property Level Flood Protection (PLFP) works.

Louth

Work started on site in July and is progressing well. The control structures at both sites are substantially complete and adjoining culverts have been installed. Work to the earth embankment on the north site is 40% complete and trial embankments have commenced on the south site. There have been site visits with the town Council and Monks Dyke Tennyson College. The wet weather in December and January led to a suspension of earthworks which have led to a delay to the completion. Negotiations with the landowners are continuing.



North site control structure



Internal view of control structure

Horncastle

Work began on site in July 2015. There have been significant archaeological finds on the site. The lattice timber work has provided an insight into how the river was managed. Samples have been sent for carbon dating. Due to the type of material at the site, construction of the main earthworks has stopped for the winter period. Work continued on the control structure until early February when it was more cost effective to stop all work on site until the earthworks can resume. There have been sites visits with the Town and Parish Councils. The scheme is expected to finish in September 2016.

Agreements in principle have been reached with five of the seven landowners and some advance payments have been made.



Arial view of control structure



Steelwork fixed to central dividing wall

2. Conclusion

Construction work has commenced at both Louth and Horncastle. The archaeological investigation at Horncastle and the susceptibility of the available material to wet weather has put back the expected completion date to September 2016. The wet weather in December and January led to a suspension of earth work at Louth pushing back the completion date of that scheme to August 2016. There remains a risk of delay due to inclement weather.

3. Consultation

a) Policy Proofing Actions Required

Not applicable

4. Background Papers

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

This report was written on behalf of Deborah Campbell, who can be contacted on (01522) 784387 or deborah.campbell@environment-agency.gov.uk

Boston Barrier

February 2016

Approvals and Assurance

Outline Business Case (OBC) was submitted to the EA's Large Project Review Group (LPRG) in December 2015 and presented to a combined LPRG / Defra meeting on 7th Jan 2016. It was well received. Acceptance of the OBC will assist us in securing OGC Gateway 2 approval (Delivery Strategy) which initiates the Design & Build tender process.

The EA met Defra on 13th January 2016 to specifically discuss Defra's comments on the OBC and to review Defra / HM Treasury approval and assurance requirements.

Transport and Works Act Order (TWAO) Application

We programme submission of TWAO Application in May 2016.

Project Team currently addressing concerns of local fishermen and river leisure users; with our consultants Motts undertaking further computational modelling of specific river flow scenarios to give these stakeholders confidence in the design.

Port of Boston (PoB)

The PoB is a key stakeholder and potentially the stakeholder most significantly affected by the works.

We have been working closely with the port to mitigate impacts on their, and their customer, operations. We have agreed Heads of Terms with the Port and are working towards reaching a legal Agreement with the Port (likely to be secured prior to the submission of the TWAO application).

Delivering the project

We have awarded CH2M Hill a contract to support the EA as an Independent Technical Advisor through the delivery stage of the project. This role will support the EA in appointing the remainder of the delivery team and review designs produced by the Design & Build supplier.

We plan to hold the Design and Build Competition for the project later in 2016; programming to appoint them before the end of the year.

Still on programme for 2019 completion.



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Steeping River

February 2016

Background

The Steeping River is located in east Lincolnshire and drains almost 200km² of the Wolds around the villages of Tetford, Spilsby, Partney and Wainfleet, before flowing out to sea at Gibraltar Point. Upstream of Great Steeping village, the watercourse is known as the River Lymn and flows in a shallow valley with some low defences in places, largely protecting arable land. Downstream of Great Steeping, the watercourse is known as the Steeping River, which has been straightened and embanked as it flows towards Wainfleet over low-lying agricultural land. At Thorpe Culvert, a flood relief channel was constructed in the early 1970s to take high flows around Wainfleet town. This channel rejoins the Steeping River downstream of Wainfleet, and the river outfalls to the sea at Clough House Sluice, adjacent to Gibraltar Point.

Widespread flooding occurred across the country in June 2007, and the Steeping catchment was no exception. A number of localised low spots in the banks allowed water to overtop the defence, flooding land and 10 houses in Wainfleet and Great Steeping. Following the floods, we have carried out various works to reduce flood risk from the Steeping River, including raising the localised low spots in the banks, improving the operation of sluice gates at the outfall and some removal of silt in the channel upstream of Wainfleet.

Wainfleet Relief Channel bank strengthening

In parallel to the catchment-wide investigations, the partnership is promoting a scheme to strengthen the right hand (southern) bank along the Wainfleet Relief Channel. We have concerns over the integrity of this bank and the risk of a breach which could flood significant areas. The current bank is too narrow for modern machinery to safely work on, which is not only impacting on the maintenance of the bank, which has in turn resulted in seepage and other problems, but also the relief channel itself, which then adds to the silt issue.

The works have an allocation in the RFCC-consented six-year programme of £1.3m for 2016/2017, with £0.9m coming from Local Levy. A wide range of options are being considered, including various construction techniques, to achieve an efficient and cost-effective design for a robust defence with improved access for future maintenance. The design of the scheme is being fast-tracked at present, through a dedicated project team and existing consultancy frameworks. At this stage there is no certainty the scheme can be justified according to the current government rules. We are doing all that we can to secure necessary approvals. Construction is likely to be phased over two years, with full completion in 2018.

Badgers

The Protection of Badgers Act 1992 makes it an offence to not only injure or kill a badger but also to disturb, damage or obstruct an active sett.

We continue to carry out routine and reactive maintenance to the embankments, including repairing any damage caused by badgers and rabbits. Badgers are a perpetual problem on the Steeping River and Wainfleet relief channel, with several setts currently being filled in. We have obtained licenses from Natural England for filling in some of the badger setts, although new ones are discovered regularly. Each sett can have multiple holes in the bank. A sett at the downstream end of the relief channel - which has around 20 holes in the bank - has been isolated to prevent badgers using it for the required 21 days and has just been declared inactive. Work will begin to fill the holes in the near future.

We are in discussion with Natural England to find a more sustainable method for dealing with the badgers, while securing the integrity of the banks and safety of our workforce. As part of this we are planning the construction of an artificial sett in a location which will not affect the integrity of the banks, with a view to 'encouraging' the badgers to use this instead of the banks.

Community and Political Engagement

In late January a meeting was held between ourselves, Wainfleet Town Council and Matt Warman (MP) regarding flood risk in Wainfleet and along the Steeping in general. In particular the issue of badgers in the banks was discussed.

We are preparing a full community engagement strategy to work alongside the wider catchment flood risk study and would welcome partners support in this.

Briefing Note

Fulney Lock (River Welland)

February 2016

Background

Fulney Lock is located in Spalding on the River Welland, for which the Environment Agency is the navigation authority, and marks the boundary between the tidal and non-tidal sections of the River Welland. As a tidal lock, it provides defence against incoming tides (particularly surge tides) as well as allowing boat passage between the fluvial and tidal sections of the waterway.

Fulney Lock comprises of two pairs of downstream facing gates (flood doors) and one pair of upstream facing gates (ebb gates). The ebb gates, located between the two outer gates, retain the freshwater level when the level of tidal water is lower.



Fulney Lock is a 'manned lock', i.e. a lock keeper operates the lock, and passage must be booked in advance. Our internal procedures require double manning during lock passage, which is restricted to a rising tide as the ebb gates will close in an uncontrolled manner when tidal water level is lower than freshwater level.

The problem

Fulney Lock suffers from the effects of silt deposition, from flooding events and at each high tide. As the lock is infrequently used for boat passage, the lock is 'flushed' by the lock keeper on a regular basis, approximately once a month. This involves fully opening the paddles in the ebb gates on an outgoing tide so that water is drawn through the lock to dislodge any silt build up.



Photograph showing the upstream and middle lock gates. The paddles in the middle (ebb) gates are permanently cracked open to maintain a flow of water through the lock. This helps to disperse silt laden water drawn down from the upstream reach.

There are no paddles in the upstream lock gates and those in the tidal gate are permanently sealed closed.

The Fulney lock-keeper, who has worked with this lock for many years, inspected the lock in late March 2015 in preparation for a planned campaign cruise by the Inland Waterways Association (IWA). He found that, whilst the lock had been operable at earlier inspections, it was then inoperable due to silt build up; we believe the high spring tides contributed to this.



The above photographs show siltation around the tidal lock gates.

We tried very hard to put in place emergency de-silting works which would enable the IWA campaign cruise planned for May 2015 to go ahead. Unfortunately, the environmental risk of carrying out de-silting when water temperatures were rising was just too great and the lock was subsequently closed to navigation; such works can significantly reduce oxygen levels in the water leading to fish mortalities and other damage to the river ecosystem. Whilst flushing operations can be carried out throughout the year, major de-silting works can have significant environmental impact.

Planned Works

We carried out de-silting works at Fulney Lock in early February 2016 when water temperatures were cooler. The works include removal of silt to bed level from the lock pen and for approximately 5 metres upstream and 30 metres downstream of the structure; the work outside of the lock pen being to create silt traps. The upstream de-silting was constrained by the presence of an electricity cable that lies across the river bed. At the time of writing work is ongoing on the tidal area and will include the construction of a permanent ramp down from the bank immediately downstream of the lock to allow easier removal of tidal silt in front of the lock gates in future. The works have been managed by our Operations Delivery Team at Spalding who appointed a contractor to carry out the de-silting.

We will introduce a more robust monitoring and 'flushing' regime once the lock is re-opened following these works. Monitoring and recording how quickly the silt returns will help us to plan the timing of future de-silting works or possibly the development of a more effective way of preventing siltation of the lock. Ongoing routines may include, subject to water availability, more frequent 'flushing' and use of an air lance or water pump to dislodge any silt build up. We have asked the IWA if any of their volunteers could assist with this routine (full training to be provided); their response to date is that they are trying to organise resources to help us but cannot give a definite commitment at the moment.

Boat registration requirements for the Tidal Glen and Welland in Lincolnshire

Boats which only use the tidal Glen and Welland pay for a reduced fee for their boat registration.

These boats only pay the minimum registration charge, currently £8.50. They must provide insurance details, but are exempt from providing a Boat Safety Scheme Certificate (BSSC) or Declaration of Conformity (DoC).

If at any point these boats travel on our non-tidal waterways they must pay the full annual charge for our non-tidal waterways. They must meet the registration requirements and provide evidence of a valid BSSC or DoC as well as insurance details before they can be registered for the non-tidal waterway. The Fulney lock keeper cannot permit passage through the lock onto the non-tidal water unless a boat has the minimum requirement of a visitor licence.

Fulney Lock is not well used by boaters, on average there has been less than one boat passage per annum during the past six-seven years. The Fulney lock keeper reports that most of these passages have been for the same boat, whose permanent mooring is on the tidal reach.

Sue Cant

Lincolnshire and Northamptonshire Waterways Operations Team Leader

February 2016

Open Report on behalf of Richard Wills, Executive Director for Environment and Economy

Report to:	Flood and Drainage Management Scrutiny Committee
Date:	26 February 2016
Subject:	To report progress on the investigations undertaken in the County under Section 19 of the Flood and Water Management Act 2010 (FWMA).

Summary:

This is a standing item to inform the Committee on the position of all current Section 19 investigations in the County.

Actions Required:

Members are asked to view the current Section 19 spreadsheet at <http://www.lincolnshire.gov.uk/residents/environment-and-planning/flood-risk-management/flood-investigations/117780.article> (also included at Appendix A) and inform Committee Services in advance if they wish to raise any particular site(s) at the forthcoming Committee.

1. Background

This is a standing item to inform the Committee on the position of all current Section 19 investigations in the County.

2. Conclusion

N/A

3. Consultation

a) Policy Proofing Actions Required

N/A

4. Appendices

These are listed below and attached at the back of the report

Appendix A	Spreadsheet summarising investigations under Section 19 of the FWMA in the County.
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5. Background Papers

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

This report was written by Mark Welsh, who can be contacted on 01522 782070 or mark.welsh@lincolnshire.gov.uk.

Duty to Investigate
Ongoing Section 19 Investigations

Lincolnshire County Council Section 19 Investigations - Network North Area E - Contact Officer - Jeanne Gibson- Area Highways Manager						Identified Actions/Works				
Date of Incident	Town & Location	Description of Flooding	Risk Management Authorities with Responsibilities and whether they are exercising functions	Actions and Recommendations	Consideration for inclusion in future Common Works Programme	Proposed Action/Works	Promoter	Status	Estimated Timescales Recommendation / Scheme Completion	S19 Report File Reference
14/08/2015	Lincoln Lexington House Newark Road	Enquiry type : Internal Flooding Location : Lexington House, Access Road to Lexington House (ref 93U900/10), Newark Road, Lincoln Other info : A crew from Lincoln South Fire Station was called to the flats on Newark Road in the city at about 1.45am 14/8/15. A light pump and strainer was used to pump the flood water from the four flats. A Section 19 investigation required into the cause of the flooding by LCC. 4 properties	LCC - Yes	Under initial investigation by Area E	NO	Awaiting Report	LCC	On-going	Summer 2016	S19-134
23/12/2015	Lincoln The Park	Drainage overwhelmed by surface water, which continued to flow through the business' wall and cause internal damage to carpets in rear room. The cause of flooding is inconclusive as to the location of the internal flooding 1 property	LCC-Yes	Under initial investigation by Area E	NO	Awaiting Report	LCC	On-going	Summer 2016	S19-149
23/12/2015	Lincoln Lindum Avenue	Surface water is running down the hill outside the property filling the gullies. The water is then rising up through the floorboards in the kitchen located in the basement 1 property	LCC-Yes	Under initial investigation by Area E	NO	Awaiting Report	LCC	On-going	Summer 2016	S19-150

Duty to Investigate
Ongoing Section 19 Investigations

Lincolnshire County Council Section 19 Investigations - Network Area North Area F - Contact Officer - Steve Wiles - Area Highways Manager						Identified Actions/Works				
Date of Incident	Town & Location	Description of Flooding	Risk Management Authorities with Responsibilities and whether they are exercising functions	Actions and Recommendations	Consideration for inclusion in future Common Works Programme	Proposed Action/Works	Promoter	Status	Estimated Timescales Recommendation / Scheme Completion	S19 Report File Reference
28/06/2012	Keelby Maple Avenue, Riby Road and Pelham Crescent	Flooding was caused by surcharging surface water sewers combined with overland flows. 4 Properties	LCC - Yes WLDC - Yes Severn Trent Water - Yes	Further detailed study required into the ownership, condition and capacity of the surface water sewer system with a view to providing a new pipe system to intercept flows from the A18 Barton Street; to reduce flows entering the village, and to upgrade the pipe between Riby Road and Caddle Beck. Further LCC investigation and design required. Scheme bid submitted for feasibility and works.	Yes (may also require Anglian Water investment)	Surface water drainage scheme under consideration. Further LCC investigation and design required. Feasibility 2015/16 Work 2016/17	LCC AW	On-going	Investigation & Feasibility 2015/16 Possible works 2016/17	S19-032
09/06/2014	Gainsborough Marshalls Yard, Elsham Walk, Tower Street, Hill Crescent, Limber Close, Trinity Street, Silver Street, Caldicott Drive, Darwin Street, Rectory Avenue, Spring Gardens, Priory Close, Long Wood Road	Over a period of 60 minutes during the afternoon 43.4mm of rain fell in Gainsborough, of which 35.6mm fell in 30 minutes (a return period of 227 years). The surface water drains and combined sewer systems were unable to cope with the intense rainfall, the various systems consequently surcharging and the resulting surface water runoff entering properties. In all around 50 properties were flooded internally. 50 Properties	LCC - Yes WLDC - Yes Severn Trent Water - Yes	<ol style="list-style-type: none"> 1. That all RMA's inspect their respective infrastructure and take any necessary steps to ensure it is working as well as possible. 2. Advice be made available to victims of flooding with regard to resistance measures which might be appropriate, for example air brick covers and flood gates. 3. LCC consider improvements to the highway surface water drainage where this will offer resistance to flooding from surface runoff. 4. That the LLFA investigate the feasibility of overland flood routes to manage the risk of flooding from surface water 	Yes	Further investigations required by all RMA's. Liaison with Severn Trent Water in hand. Further investigations with regard to flood risk management measures subject to meeting the requirements of Defra Flood Defence Grant in Aid.	LCC Severn Trent WLDC	On-going	Investigation & feasibility 2017/18. Possible works 2018/19.	S19-115

Duty to Investigate
Ongoing Section 19 Investigations

Lincolnshire County Council Section 19 Investigations - Network Area North Area G - Contact Officer - Kyra Nettle - Acting Area Highways Manager						Identified Actions/Works				
Date of Incident	Town & Location	Description of Flooding	Risk Management Authorities with Responsibilities and whether they are exercising functions	Actions and Recommendations	Consideration for inclusion in future Common Works Programme	Proposed Action/Works	Promoter	Status	Estimated Timescales of Scheme Completion	S19 Report File Reference
14/08/2015	Potterhanworth Under Railway Bridge, Station Road	Carriageway flooding - 02:23 Hrs - Polcie incident 39 14/08/15 - Deep flood undier rail bridge on station road Potterhanworth.. Car stuck and freed by FB. 02:26 Hrs - Kier North ER to attend and close road at bridge. 03:33 Hrs ER team on site very bad and needs closing. 03:54 Hrs - Road closed and traffic diverted via Heighnton. cway flooding	LCC - Yes	Increase frequency of routine cleansing Ad-hoc cleansing of outfall with high power jet-vac Cut grips into the verge at regular intervals east and west of the bridge to reduce the quantity of highway surface water reaching the drainage system	NO	Increase frequency of routine cleansing Ad-hoc cleansing of outfall with high power jet-vac Cut grips into the verge at regular intervals east and west of the bridge to reduce the quantity of highway surface water reaching the drainage system. Works programmed End Feb 2016 A Jet to attend site	LCC	On-going	Summer 2016	S19-131
13/08/2015	North Hykeham 544b Newark Road	Standing water collects in the carriageway channel at a low point between kerb offlets, flows over a dropped kerb and footway and down the access to 544b Newark Road. 1 property	LCC-Yes	The length of dropped kerbs are no longer required and should be replaced with full face kerbs to provide a barrier to water ingress. Further work should follow on to address the standing water on the carriageway.	NO	The length of dropped kerbs are no longer required and should be replaced with full face kerbs to provide a barrier to water ingress. Further work should follow on to address the standing water on the carriageway. Site work programmed to start w/c 8/02/2016	LCC	On-going	Spring 2016	S19-130

Duty to Investigate
Ongoing Section 19 Investigations

Lincolnshire County Council Section 19 Investigations - Network North Area H - Contact Officer - Dean Myhill - Area Highways Manager						Identified Actions/Works				
Date of Incident	Town & Location	Description of Flooding	Risk Management Authorities with Responsibilities and whether they are exercising functions	Actions and Recommendations	Consideration for inclusion in future Common Works Programme	Proposed Action/Works	Promoter	Status	Estimated Timescales Recommendation / Scheme Completion	S19 Report File Reference
29/06/2012	Chapel St Leonards The Esplanade	Surcharging from the highway drainage system due to blockages within the system, root ingress and possible concerns over the number of gullies. 2 Properties	LCC - Yes	LCC has investigated the highway drainage system and undertaken a CCTV survey which indicates blockages and root infestation. Gullies and connections have been jetted. Further work is planned to clear roots and blockages within the system, and install additional gullies. The improvements are currently being designed and costed.	No	Work being designed and costed	LCC	On-going	Design 2014/15	S19-012
28/06/2012	Louth Riverhead Terrace, Louth	During heavy rainfall (estimated to be a 1 in 60 year event) flooding took place in Riverhead Terrace due to overland flows from adjacent Riverhead development, and flows from the Terrace area being unable to escape. 3 Properties	East Lindsey District Council - Yes Anglian Water - Yes	Development has taken place to the east and north of Riverhead Terrace, which is partially complete. The new development is significantly higher than the Terrace, and has severed the natural drainage and flow routes from Riverhead Terrace, such that surface water from the Terrace and land to the north is trapped against the new development. The only means of surface water disposal from Riverhead Terrace is now via a combined gravity system with an assisted foul pumping station. The pumping station was installed, subsequent to development, at the east of Riverhead Terrace. It is unlikely that this foul pumping station will have the capacity to deal with surface water flows from Riverhead Terrace and its catchment area. The new development is to be drained by Anglian Water foul and surface water sewer systems and also involves the culverting of a watercourse which previously drained the land to the north and east of the Terrace. Due to the elevation of the new development the	No	ELDC commissioned a hydrological study in April 2013 which is now complete. The report makes a number of recommendations - the most significant being to install a much larger AW pumping station. AW to make a scheme submission as part of their Price Review 14 process. Works have commenced (Aug 2014) into the upgrade of the sewer system. Work to be carried out in two phases, first being Ramsgate Road Area and then Phase two to include improvements to the Riverhead Area. All works to be completed by the end April 2015.	AW ELDC	On-going	Completion due Summer 2015	S19-016
09/06/2014	Salfleet Pump Lane	Extreme rainfall estimated at a 1 in 60 year event caused significant overland and surface water flow to enter this low lying property due to capacity issues of existing surface water drainage system. Lack of effective drainage within the property boundary is also a contributing factor. The same property also experienced similar internal / external flooding on 28th June 2012. Report Ref S19-015 1 Property	LCC - Yes	In 2012 ELDC installed a new manhole and cleansed and jetted the existing system. However, the property flooded again in 2014. Following this latest investigation, LCC Highways will carry out works outside the property which includes the installation of additional drainage apparatus (gullies & pipes) into the existing system. LCC Highways will also look into reconstructing the vehicular access with an increased kerb upstand.	No	LCC Highways to undertake drainage improvement work and carry out improvements to the vehicular access of the property.	LCC	On-going	Summer 2015	S19-087
09/06/2014	Salfleet Main Road	Extreme rainfall (1 in 60 year event) meant the highway drains were unable to cope with the amount of surface water on the carriageway and overland flow from the surrounding land. 1 Property	LCC - Yes	Following the investigation into the flooding several factors were identified: Level of property which is situated 1.3m below carriageway surface; surface water system capacity issues were also identified due to the extreme rainfall event; and surface water and overland flows from adjacent land. The recommendations identified the need for replacement of a 48m section of pipe to remove a bottle neck within the system. Additional works to possibly re-line sections of the pipe, repair damaged sections and root cutting works are to be programmed for 2015.	No	Root cutting ,possible re-lining the pipe and replacement of section of pipe.	LCC	On-going	Summer 2015	S19-094
09/06/2014	Manby Chapel Lane Provost Road / Carlton Road	Following the two periods of extreme rainfall that fell during Monday 9th and Tuesday 24th June, the surface water highway drains were unable to cope with up to 31mm of rain falling in 1 hour. Majority of the surface water was initially discharged from ELDC carpark and adjacent playground onto the carriageway. Lincolnshire Fire & Rescue attended the scene to pump out excessive surface water. 3 Properties	LCC - Yes	ELDC arranged to cleanse and jet the existing system and carry out a full investigation. The report identifies that the current system requires a major upgrade including the installation of new pipes and gullies. ELDC is installing a holding tank within its property to control the discharge of surface water onto the highway.	No	Work to upgrade the existing drainage system has been completed; the installation of the holding tank is due to be carried out very soon by ELDC.	ELDC	On-going	Dec-14	S19-095

Duty to Investigate
Ongoing Section 19 Investigations

Lincolnshire County Council Section 19 Investigations - Network North Area H - Contact Officer - Dean Myhill - Area Highways Manager						Identified Actions/Works				
Date of Incident	Town & Location	Description of Flooding	Risk Management Authorities with Responsibilities and whether they are exercising functions	Actions and Recommendations	Consideration for inclusion in future Common Works Programme	Proposed Action/Works	Promoter	Status	Estimated Timescales Recommendation / Scheme Completion	S19 Report File Reference
08/08/2014	Louth High Holme Road	Extreme rainfall caused significant overland flow and highway surface water to enter low lying properties; this was due to capacity issues of the existing surface water drainage system. Residents in the properties were evacuated to temporary accommodation due to internal flooding. 1 Property	LCC - Yes	LCC to issue a small footway drainage improvement scheme to help alleviate problems in the area although this will not resolve the problems during extreme rainfall, but may offer assistance during heavy / average rainfall.	No	LCC Highways to undertake a small footway/drainage scheme and carry out further investigations regarding drainage capacity issues.	LCC	On-going	Spring 2015	S19-088
08/08/2014	Louth Sandringham Drive	Extreme rainfall in the Louth area, caused a property to flood internally. The property is located at a low point and surface water from the highway entered the garage and flooded the living room and conservatory. The surface water gully located in the carriageway outside the vehicle access may of been blocked or the amount of surface water may of overwhelmed the drainage system causing the internal flooding to the property. 1 Property	LCC - Yes	Due to the intensity of the rain cleaning and jetting the system won't completely resolve the issue. Assuming the drainage system is kept in good working order the most likely solution to ease the problem of flooding will be to increase the upstand of the dropped kerbs to +25mm. This will be carried out as a small highway maintenance scheme.	TBC	Minor works to increase the upstand of the dropped kerbs will be carried out in due course	LCC	On-going	Summer 2016	S19-126
08/08/2014	Louth Westgate	Extreme rainfall in the Louth area, caused 2 properties to flood internally. The properties are at a particular low topographical point of the town and subject to overland and highway surface water to flow from the higher land in the south. 2 Properties	LCC -Yes	Due to capacity issues the gully cleansing and jetting is unlikely to resolve the problem during extreme rainfall, as the quantity of surface water would overwhelm any standard drainage system. However this will hopefully ease the extent of flooding and be effective during heavy / average rainfall. LCC Highways to arrange for a CCTV drainage investigation to be carried out. Depending upon the results may arrange for a scheme to be carried out to upgrade the existing system or create additional facilities. Once a solution is identified and costed, funding / contribution may be applied for through the LLFA. A flood alleviation scheme is planned for the River Lud at Riverhead in Louth.	No	CCTV drainage investigation to be carried out in due course.	LCC	On-going	2016 TBC	S19-124
10/08/2014	Chapel St. Leonards South Road	Highway surface water entered the property through the vehicular access and flooded the driveway and then entered the living area of the dwelling. 1 Property	LCC - Yes	Due to capacity issues the gully cleansing and jetting is unlikely to resolve the problem during extreme rainfall, as the quantity of surface water would overwhelm any standard drainage system. However this will hopefully ease the extent of flooding and be effective during heavy / average rainfall, together with the solutions installed by the residents. LCC Highways to arrange a CCTV drainage survey to identify any blockages or defects within the system. Assuming the drainage system is in good working order, the most likely solution to ease the problems of flooding will be to increase the upstand of the dropped kerb to +25mm and install an additional gully at the lowest point (determined by level survey), and connect to the existing surface water drainage system. This will be carried out as a small highways maintenance scheme.	NO	CCTV drainage investigation to be carried out in due course. Along with the installation of an additional gully and increasing the upstand of the vehicular access to +25mm.	LCC	On-going	2016 TBC	S19-125
25/12/2015	Louth Eastfield Road	Property flooded twice of the xmas period due to surface water running down the highway	LCC - Yes	Internal flooding confirmed by DM Investigation & Report ongoing	TBC	Awaiting Report	LCC	On-going	TBC	S19-151

Duty to Investigate
Ongoing Section 19 Investigations

Lincolnshire County Council Section 19 Investigations Network North Area J- Contact Officer - Andrew Ratcliffe - Area Highways Manager						Identified Actions/Works				
Date of Incident	Town & Location	Description of Flooding	Actions and Recommendations	Consideration for inclusion in future Common Works Programme	Proposed Action/Works	Proposed Action/Works	Promoter	Status	Estimated Timescales Recommendation / Scheme Completion	S19 Report File Reference
28/06/2012	Horncastle East Street and Stanhope Road Area	Extreme rainfall (estimated to be a 1 in 50 year event) caused overland and highway surface water flows to collect at the low area of East Street and Stanhope Road. The extreme rainfall overwhelmed the highway drainage system which was also suffering from surcharged outfalls due to high river levels. 2 Properties	LCC - Yes	LCC has undertaken a CCTV survey of the highway drainage system in the area which has identified some minor defects and obstructions which will be addressed. LCC has also undertaken initial modelling work to help understand and assess the surface water flood risk in Horncastle. A further meeting with Anglian Water is to be arranged, and a bid for an overall surface water study for Horncastle is being submitted by LCC.	Yes	A bid for an overall surface water study for Horncastle has been submitted with feasibility and design programmed for 2014/15 if approved; works to be programmed 2015/16/17.	LCC AW	On-going	2014 & 2015 - 2017	S19-001
28/06/2012	Horncastle West Street	Extreme rainfall (estimated to be a 1 in 50 year event) caused significant overland flows from the adjacent school field, hillside and Lincoln Road. The surface water collected at the bottom of the hill causing flooding to the Grammar School and adjacent properties in West Street. 3 Properties	LCC - Yes Anglian Water - Yes	LCC has undertaken a check of the highway drainage system in West Street and has cleaned out a number of gullies and removed the blockages. LCC has also undertaken initial modelling work to help understand and assess surface water flood risk in Horncastle. A bid for an overall surface water study for Horncastle is being submitted by LCC.	Yes	Blockages removed and gas main relocated. A bid for an overall surface water study for Horncastle has been submitted with feasibility and design programmed for 2014/15 if approved; works to be programmed 2015/16/17.	LCC	On-going	2014 & 2015 - 2017	S19-002
28/06/2012	Horncastle South Street and Bull Ring	Extreme rainfall (estimated to be a 1 in 50 year event) caused overland and highway surface water flows to collect at the low area of the Bull Ring and South Street overwhelming the Anglian Water sewer systems; which were also suffering from surcharged outfalls due to high river levels. 3 Properties	Anglian Water - Yes LCC - Yes	Whilst the flooding was caused by extreme rainfall and overland flows, LCC has undertaken a CCTV survey of the underground surface water systems. This has revealed a number of condition concerns in relation to a brick culvert system owned by Anglian Water. The report has been passed to Anglian Water in order that they consider future action and repairs. LCC has in addition carried out repairs to gullies and connections in South Street. LCC has also undertaken initial modelling work to help understand and assess surface water flood risk in Horncastle. A bid for an overall surface water study for Horncastle is being submitted by LCC. Anglian Water works to clear blockages have been completed. Planned Environment Agency works regarding outfall issues and river levels may reduce flood risk.	Yes	LCC gullies and system checked and repaired. Anglian Water checking surface water systems and may consider improvement works in future asset management plans. Feasibility and design programmed for 2014/15 and if approved; works to progress in 2015/16/17.	LCC	On-going	2014 & 2015 - 2017	S19-003
28/06/2012	Horncastle Mark Avenue, Accommodation Road and Prospect Street	Extreme rainfall (estimated to be a 1 in 50 year event) caused significant overland flows from the adjacent hillside and agricultural land. This was exacerbated by the interceptor ditch being restricted at its entrance to the culvert system, which caused flooding to properties in Mark Avenue, Accommodation Road and Prospect Street. 14 Properties	Anglian Water - Yes Witham 3rd IDB - Yes East Lindsey District Council - Yes	Whilst the flooding was caused by extreme rainfall and flows from adjacent land, investigations revealed an intercepting ditch which flows into a culverted watercourse which is shown on Anglian Waters records. East Lindsey District Council has cleared the culvert and trash screen. LCC has also undertaken initial modelling work to help understand and assess surface water flood risk in Horncastle. Ditches cleaned out and discussions are ongoing between Anglian Water and Witham 3rd Internal Drainage Board regarding ownership. A bid for an overall surface water study for Horncastle is being submitted by LCC.	Yes	Ditches cleaned out. Discussions ongoing between Anglian Water and Witham 3rd IDB regarding ownership. A bid for an overall surface water study for Horncastle has been submitted with feasibility and design programmed for 2014/15 if approved, works to be programmed 2015/16/17.	LCC AW Witham 3rd IDB	On-going	2014 & 2015 - 2017	S19-005
28/06/2012	Horncastle Bowl Alley Lane	Extreme rainfall (estimated to be a 1 in 50 year event) caused significant overland flows from the adjacent school field and Bowl Alley Lane. The surface water collected at the lowest point causing flooding to the adjacent properties in Bowl Alley Lane. 3 Properties	Anglian Water - Yes LCC - Yes	Whilst the flooding was caused by extreme rainfall and overland flows, LCC has undertaken a CCTV survey of the underground surface water systems in the area. This has revealed a number of condition concerns in relation to the system owned by Anglian Water. The report has been passed to Anglian Water and future discussions will be undertaken in order that it considers future action and repairs. In addition, LCC is planning to install additional drainage protection features in front of the affected properties, and is in discussion with the school with respect to intercepting flows from the school car park. A bid for an overall surface water study for Horncastle is being submitted by LCC.	Yes	Partnership scheme developed between LCC Highways, Education, AW and initial work delivered. A bid for an overall surface water study for Horncastle has been submitted with feasibility and design programmed for 2014/15 if approved; works to be programmed 2015/16/17.	LCC AW	On-going	2014 & 2015 - 2017	S19-006

Duty to Investigate
Ongoing Section 19 Investigations

Lincolnshire County Council Section 19 Investigations Network North Area J- Contact Officer - Andrew Ratcliffe - Area Highways Manager						Identified Actions/Works				
Date of Incident	Town & Location	Description of Flooding	Actions and Recommendations	Consideration for inclusion in future Common Works Programme	Proposed Action/Works	Proposed Action/Works	Promoter	Status	Estimated Timescales Recommendation / Scheme Completion	S19 Report File Reference
28/06/2012	New Bollingbrooke Main Road/Station Row	Extreme rainfall (estimated to be a 1 in 40 year event) caused highway surface water flows to collect in the low area of Main Road/Station Row overwhelming the highway drainage system in the footway. 7 Properties	LCC - Yes	LCC has investigated the drainage and found blockages/damage due to buildings and tree roots. A solution to rectify the damage is being designed and costed.	No	Dropped kerbs outside the post office replaced with full height kerbs. Drainage system found to be damaged by buildings/trees and a new outfall is required. Solution being designed and costed.	LCC	On-going	2014 - 2016	S19-007
28/06/2012	Toynton St Peter Ings Lane	Extreme rainfall caused overland flows to surcharge a number of watercourses in the area resulting in flooding to a low lying property in Ings Lane. 1 Property	Witham 4th IDB - Yes LCC - Yes	It is recommended that a new watercourse be cut to the south to divert flows from Toynton St Peter away from the flooded property. Witham 4th Internal Drainage Board is considering a scheme. However, this is likely to be a low priority due to the cost, legal issues and minimal benefits.	Yes	Witham 4th IDB considering a capital scheme submission with possible upgrading/realigning of drains in the area. Investigation works programmed for 2016/17/18. Possible works 2018/20.	Witham 4th IDB	On-going	Investigation 2016/17/18 Possible works 2018/19/20	S19-010
28/06/2012	Wainfleet Station Road	Internal flooding to four properties, during intense rainfall, due to inoperative highway drainage system. This was caused by damage from utility companies and the outfall/ditch not being maintained. 4 Properties	LCC - Yes	LCC should clean all gullies and restore the highway drainage system and ensure these are running efficiently to the River Steeping. Further monitoring should be carried out.	No	LCC have cleaned all gullies, restored the highway drainage system and ensured they are running efficiently to the River Steeping - further monitoring to be carried out	LCC	On-going	Spring 2015	S19-017
28/06/2012	Skegness Sunningdale Drive	Intense rainfall overwhelmed AW surface water sewer system causing internal flooding to one property. 1 Property	Anglian Water - Yes	Investigations by AW discovered three blockages/damage to the main surface water sewer on Sunningdale Drive, due to incursions from other utility companies.	No	Blockage/damages have now been addressed by AW and the private drainage system cleared. AW has applied for funding to CCTV survey the remainder of the system.	AW	On-going	Spring 2015	S19-018
06/07/2012	Burgh Le Marsh High Street	Overland and highway surface water flows entering low lying property due to suspected lack of capacity and defects in the surrounding highway drainage system, despite previous kerbing works aimed to mitigate problem. 1 Property	LCC - Yes	LCC have investigated the surface water system and identified damage caused by utility activity. LCC will enforce repair once utility has been identified.	No	Works to raise kerbs and regrade footway in hand. New surface water sewer/drain in carriageway with outfall to Catchwater Drain is budget dependent. Initial discussions with LMIDB have been undertaken to investigate routing and outfall locations.	LCC LMIDB	On-going	2014/15	S19-024
09/06/2014	Hagworthingham Sausthorpe Road	Following torrential rainfall, drains were unable to expell the surface water causing it to flow onto the driveway and enter the property owners conservatory. 1 Property	LCC - Yes	LCC Highways has cleansed and jetted the existing drainage system. The report into the drainage investigation is still outstanding and CCTV investigation of the drainage system will be carried out if required.	No	Drainage system has been jetted and cleansed awaiting report. If required a CCTV investigation will be carried out to identify any problems within the system.	LCC	On-going	Summer 2015	S19-092
09/06/2014	Bucknall Platts Lane	Extreme rainfall caused significant surface water to flow along the highway. The highway drains were unable to cope, allowing water to flow over the kerbed accesses to the properties, causing internal flooding. 2 Property	LCC - Yes	LCC to clean and jet the whole system through to the outfall to ensure the system is running free. Minor highway maintenance is required to remove a pedestrian dropped kerb access to mitigate flooding to one of the properties. Further highway work to be programmed to remove an area in front of the kerb, this will increase the kerb face and direct water away from the second property. Further drainage investigations may be required. Install additional gullies up stream of the affected properties.	No	Following the cleansing and jetting of the entire system highway maintenance work and further drainage investigations will be funded during 2015.	LCC	On-going	Summer 2015	S19-093
24/06/2014	Horncastle Langton Hill	Extreme rainfall estimated at being a 1 in 30 to 1 in 100 year event resulted in significant overland flows from the surrounding land. The combined surface water and overland surface water flow overwhelmed the highway sewer system on Langton Hill and West Street and caused flooding at the bottom of the hill which affected one property. 1 Property	LCC - Yes	Following a similar event in 2012, works were undertaken by AW and LCC Highways to rectify defects to the surface water systems along Langton Hill and West Street. However, defects to one section of the highway drainage system are yet to be completed. There appears to be issues with the capacity of the system in the area. LCC recommend the completion of the initial project identified in 2012 along with profiling the footway and lifting the kerb face to divert surface water away from the property, this is currently underway. There is also a ditch at the higher end of Langton Hill which requires cleaning out and Witham 3rd IDB require action by the riparian land owners.	No	Reprofiling of the footway is currently underway along with the completion of outstanding works; all due to be completed by the end of March 2015. The cleaning out of the ditch is yet to be undertaken by the riparian owner.	LCC Witham 3rd IDB AW	On-going	Completeion due Spring 2015	S19-096
09/06/2014	Skegness North Parade	Intense summer rainfall caused internal flooding to the hotel. Surface water entered the building via the ladies toilets. 1 Property	LCC - Yes Anglian Water - Yes	AW to investigate the capacity of the surface water system. The property owners should investigate whether they have sufficient drainage within their land to accommodate the normal flows expected.	No	Further investigations to be carried out by AW and recommendations advised to property owners.	LCC AW	On-going	Spring 2015	S19-101

Duty to Investigate
Ongoing Section 19 Investigations

Lincolnshire County Council Section 19 Investigations Network North Area J- Contact Officer - Andrew Ratcliffe - Area Highways Manager						Identified Actions/Works				
Date of Incident	Town & Location	Description of Flooding	Actions and Recommendations	Consideration for inclusion in future Common Works Programme	Proposed Action/Works	Proposed Action/Works	Promoter	Status	Estimated Timescales Recommendation / Scheme Completion	S19 Report File Reference
24/06/2014	Skegness Sunningdale Close	Following torrential rain, the highway drains were unable to cope with the amount of surface water on the carriageway. The flood water entered the property. 1 Property	LCC - Yes Anglian Water - Yes	AW to investigate the capacity of the surface water system. The property owners should consider installing cut off drains to collect water before it enters the property and ensure discharge to an appropriate location, or consider other property level protection measures.	No	Further investigations to be carried out by AW and recommendations advised to property owners.	LCC AW	On-going	Spring 2015	S19-098
24/06/2014	Skegness Sunningdale Drive	Following torrential rain, the highway drains were unable to cope with the amount of surface water on the carriageway. The flood water entered the property, whilst the owners were away on holiday. 1 Property	LCC - Yes	Following investigations carried out by AW in 2012, third party obstructions were identified at several locations within the system. Three of these were resolved in 2013 and a further drainage survey was carried out. AW to carry out further investigations.	No	Further investigations to be carried out by AW and recommendations advised to property owners.	LCC AW	On-going	Spring 2015	S19-099
24/06/2014	Skegness Theatre, Grand Parade	Following torrential rain, the highway drains were unable to cope with the amount of surface water on the carriageway and a property was flooded. 1 Property	LCC - Yes	AW to investigate the capacity of the surface water system. ELDC should consider investigating whether it has sufficient drainage within its land to accommodate the normal flows expected.	No	Further investigations to be carried out by AW & ELDC	LCC AW ELDC	On-going	Spring 2015	S19-100
27/06/2014	Skegness Junior School Academy Pelham Road	During torrential rain, school corridors were overwhelmed with flood water from the 3 internal downpipes located within the schools corridor. Due to the back up of silt and debris located in the main drain on Pelham Road, excess water from the downpipes overflowed into the Year 5 corridor causing internal flooding. 1 Property	LCC - Yes	AW should investigate the surface water system for possible restrictions to flow. Further investigations regarding the outfall of the system need to be undertaken in due course.	No	Further investigations to be carried out by AW	LCC AW	On-going	Summer 2015	S19-102
08/08/2014	Friskney Fold Hill / Low Road	Intense rainfall that fell over a short period of time and flowed over agricultural land causing internal flooding to one property. 1 Property	LCC - Yes Witham 4th IDB - Yes ELDC - Yes	All drainage systems should be cleaned out and long term maintenance strategy considered by the owners of the assets.	No	Witham 4th IDB have agreed to clean out and adopt a short section of ditch downstream of the culverted system. ELDC and LCC are contributing to an investigation and a one off clean of the riparian system.	LCC ELDC Witham 4th IDB	On-going	Summer 2015	S19-117
08/08/2014	Wainfleet All Saints Bethlem Crescent	Intense rainfall that fell over a short period of time caused internal flooding to one property. 2 Property	LCC - Yes Anglian Water - Yes	AW should consider investigating the surface water drainage system within the local area to determine if there is sufficient capacity to drain the local area to 1 in 30 year standard	No	Further investigations to be carried out by AW	LCC AW	On-going	Summer 2015	S19-118
08/08/2014	Horncastle Stanhope Road	Extreme rainfall caused significant highway flows to collect at the low area of Stanhope Road; overwhelming both the Anglian Water Surface Water Sewers and the highway drainage system. 1 Property	LCC - Yes Anglian Water - Yes	Following the flooding in 2012 LCC have carried out a CCTV survey of the highway drainage system which identified some minor defects and obstructions AW will be undertaking a CCTV survey of their system. LCC have undertaken modelling work to help understand and assess surface water flood risk in Horncastle. There is also a flood alleviation scheme planned for Horncastle and the River Bain. The defects and obstructions will need to be addressed and consideration for additional gullies and connections.	Yes	A meeting has been planned with AW to discuss the findings of both the CCTV surveys, consider the work required and to ensure a collaborative resolution.	LCC AW	On-going	End 2015 TBC	S19-120
08/08/2014	Wainfleet All Saints High Street	Extreme rainfall caused significant highway flows. The rainfall on the carriageway overwhelmed the highway surface water systems on the High Street, which flowed over the kerb and the movement of passing vehicles caused flooding to one property. 1 Property	LCC - Yes	Following further flooding LCC will undertake cleaning and jetting of the highway surface water system through to the outfall to clear any blockages; however, due to the location and the proximity of the railway crossing permissions to work in the area will need to be granted by Network Rail before any works can commence. If the above does not resolve the issues or if any defects are found a full CCTV survey will be commissioned to ascertain the extent of any defects.	No	Works to clean and jet the surface water system to be programmed but there are issues whilst working near railways that need to be addressed prior to any works commencing.	LCC	On-going	End 2015 TBC	S19-121
19/09/2014	Irby In The Marsh Wainfleet Road	Extreme rainfall caused significant highway flows. The rainfall on the carriageway overwhelmed the highway surface water systems on Wainfleet Road, flowing over the dropped access kerbs and causing flooding to one property. 1 Property	LCC - Yes	Highway works are to be undertaken to install a tarmac bund in the access to redirect surface water away from the property towards the highway gully and ditch. Further works to be programmed during 2015 include cleaning and jetting the gully and connections to ensure they are working efficiently.	No	Initial works to install a tarmac bund in the access have been carried out. Works to clean and jet the gully and connections to be carried out shortly	LCC	On-going	Summer 2015	S19-122
05/06/2015	Skegness Police Station, Park Avenue	TBC - 1 property	LCC	Under initial investigation by AR, awaiting feedback	NO	Awaiting Report		On-going	Summer 2016	S19-142

Duty to Investigate
Ongoing Section 19 Investigations

Lincolnshire County Council Section 19 Investigations Network North Area J- Contact Officer - Andrew Ratcliffe - Area Highways Manager						Identified Actions/Works				
Date of Incident	Town & Location	Description of Flooding	Actions and Recommendations	Consideration for inclusion in future Common Works Programme	Proposed Action/Works	Proposed Action/Works	Promoter	Status	Estimated Timescales Recommendation / Scheme Completion	S19 Report File Reference
04/07/2015	Woodhall Spa Green Lane	Internal Flooding due to a Riparian owned ditch overtopping and entered property notified LLFA feb 15 flooding incident 2012	LCC Witham 3rd IDB	Internal flooding confirmed by JH investigation & report ongoing	NO	To clean out the blocked/overgrown watercourse and ensure it is regularly maintained Witham 3rd IDB to monitor the maintenance of the riparian ditch and take appropriate enforcement action if required in the future	LCC Witham 3rd IDB	On-going	End 2015	S19-143
31/12/2015	Langton by Spilsby Langton Road	Internal Flooding occurred when a re-build drain which is blocked within the drainage system flooded the area and entered the property	LCC AW	Internal flooding confirmed by JH investigation & report ongoing	NO	Further investigations required to identify blockage/collapse within the sewer system.	LCC AW	On-going	End 2015	S19-146
31/12/2015	Swaby Mill Row	Awaiting Confirmation of Flooding this will be available late Feb	TBC	Awaiting Confirmation of Flooding this will be available late Feb	NO	Awaiting Confirmation of Flooding this will be available late Feb	TBC	On-going	TBC	S19-148

Duty to Investigate
Ongoing Section 19 Investigations

Lincolnshire County Council Section 19 Investigations - Network South Area L - Contact Officer- Rowan Smith - Area Highways Manager						Identification Actions/Works				
Date of Incident	Town & Location	Description of Flooding	Risk Management Authorities with Responsibilities and whether they are exercising functions	Actions and Recommendations	Consideration for inclusion in future Common Works Programme	Proposed Action/Works	Promoter	Status	Estimated Timescales Recommendation / Scheme Completion	S19 Report File Reference
28/06/2012	Ruskington High Street North and South, Manor Street, Chapel Street and Chestnut Street	Overtopping of Ruskington Beck (Main River) and surcharge of foul sewers and overtopping of riparian watercourse. 6 Properties	Environment Agency - Yes Anglian Water - Yes Witham 1st IDB (Enforcement) - Yes	The Environment Agency is to remodel Ruskington Beck (hydraulic) and carry out riparian enforcement. Anglian Water is investigating the foul water system and is considering an improvement scheme. A bid for an overall study for Ruskington has been submitted for feasibility, design and works.	Yes	Investigation ongoing LCC, AW, EA meeting held with all partners' involved to discuss scheme brief. Feasibility and Design 2014/15; possible work 2016/17.	LCC AW EA	On-going	Feasibility and Design 2014/15 Possible works 2015-17	S19-045
28/06/2012	Cranwell Thorald Avenue	Surface water surcharge from private parking area and highway gullies onto private property causing internal flooding of conservatory. Possible contributing factors due to the development of adjacent land which was historically an area of flood plain. Non maintenance of riparian watercourse. 1 Property	Witham 1st IDB - Yes LCC - Yes North Kesteven District Council - Yes	Investigations ongoing between LCC, North Kesteven District Council and Landowners. Work to divert water away from garages being looked at. Landowner has been written to regarding possible cutting of new dyke.	No	Investigations ongoing LCC, NKDC, Landowners possible work being investigated to divert highway water away from private land. Survey complete & report received. Further meeting with NKDC Nov 2014.	LCC NKDC	On-going	Summer 2016	S19-047
28/06/2012	Digby North Street	Overland flow from field into private properties, also blocked culvert/watercourse on school playing field. 8 Properties	LCC - Yes Witham 1st IDB - Yes	LCC, Witham First IDB and the Environment Agency are to undertake local maintenance and are considering improvement works following consultation with the Parish Council. A bid for an overall flood risk study for Digby has been submitted for feasibility, design and works.	Yes	Local maintenance work carried out by LCC, IDB & Landowner and residents on Green Dykes and North Street. Wider improvement scheme under consideration. Feasibility and Design 2014/15. Possible works 2015/16/17.	LCC Witham 1st IDB EA	On-going	Feasibility and Design 2014/15 Possible works 2015-17	S19-048
	Digby Beck Street	Overtopping of Digby Beck (Main River) and capacity issues on the foul sewer. 2 Properties	Environment Agency - Yes Anglian Water - Yes LCC - Yes		Yes					S19-049
	Digby The Hum	Overtopping of IDB drain (Digby Beck North Branch) and riparian watercourse. Suspected failure of Anglian Water foul pumping station. 10 Properties	Witham 1st IDB - Yes Anglian Water - Yes		Yes					S19-050
28/06/2012	Scopwick Main Street	Ditch backing up and overtopping due to volume of surface water in the main surface water pipe system. 1 Property	Witham 1st IDB (Enforcement) - Yes LCC - Yes	LCC has jetted the system, further investigations into ownership of main piped drain and open ditch are ongoing. Two pipes under the road culvert were sufficient to cope with the expected flows and no alterations will be required. However, it was agreed that a camera survey would be appropriate to ensure flow was unrestricted, this was completed in Nov 2013. The drainage report clearly shows two intrusions of utility apparatus blocking the flow at two separate points by up to 40%. AW is considering repairs to the breakages and move its services out of the way. Riparian drainage and maintenance works are required. Investigation needed into overland and groundwater flows into new development.	No	Works carried out on replacement of culvert April 2014. Further investigation works to clear other obstructions on going, and liaising with EA in regards to surface water flow.	LCC	On-going	Spring 2016	S19-052
28/06/2012	Sleaford Southgate	Surface water from public highway and private land flowing into properties through front and rear entrances. 2 Properties	LCC - Yes Anglian Water - Yes	LCC to advise properties on self prevention measures relating to flood resilience. Anglian Water to investigate capacity of combined system.	No	LCC actions completed but awaiting AW investigation. LCC liaising with Anglian Water in regards to capacity issues.	LCC AW	On-going	Summer 2015	S19-053
28/06/2012	Timberland & Thorpe Tilney Village Various	Surcharging of open watercourses and assumed restrictions within culverted sections. Surcharge of public surface and foul water systems. 3 Properties	Witham 1st IDB - Yes LCC - Yes Anglian Water - Yes	Improvement works on watercourse undertaken November 2012. Ongoing LCC investigations, further excavations to commence to provide access for CCTV survey, also minor kerbing improvements and works issued. A meeting has been held with the Parish Council/Flood Group/National Flood Forum. A bid for an overall study for Timberland has been submitted for feasibility, design and works.	Yes	Local work involving excavations to provide access for CCTV survey on-going. Kerbing work completed. Wider scheme Feasibility and Design 2016/17/18. Possible works 2018/19. LCC to carryout regular monitoring.	LCC	On-going	Feasibility 2017/18 Possible works 2018/19	S19-054
28/06/2012	Swaton West End / High Street	Overland surface water flowing through private land. Separate case of overtopping of Swaton Eau flooding carriageway and property basement. 2 Properties	Environment Agency - Yes Black Sluice IDB - Yes LCC - Yes	The Environment Agency has completed its hydraulic modelling works. Black Sluice Internal Drainage Board has previously bid for an improvement scheme. Environment Agency / LCC have been asked to assist with scheme promotion.	Yes	EA completed modelling, discussion on-going with LCC regarding possible escape route for residents. Also considering resilience measures for properties. Awaiting conclusion of EA/IDB catchment Study	LCC EA Black Sluice IDB	On-going	EA Feasibility Study 2014/15 Possible works 2016/17	S19-056

Duty to Investigate
Ongoing Section 19 Investigations

Lincolnshire County Council Section 19 Investigations - Network South Area L - Contact Officer- Rowan Smith - Area Highways Manager						Identification Actions/Works				
Date of Incident	Town & Location	Description of Flooding	Risk Management Authorities with Responsibilities and whether they are exercising functions	Actions and Recommendations	Consideration for inclusion in future Common Works Programme	Proposed Action/Works	Promoter	Status	Estimated Timescales Recommendation / Scheme Completion	S19 Report File Reference
06/07/2012	Burton Pedwardine White Cross Lane / Asgardby Road	Surface water surcharge from private open watercourse to the east. 2 Properties	Black Sluice IDB - Yes	Black Sluice IDB to carry out enforcement. Resident met and awaiting proposals which may be subject to a highway contribution. Awaiting confirmation.	No	Discussions still ongoing between LLFA, IDB and residents. LCC have found and cleaned 2 pipes under road.	LCC Black Sluice IDB	On-going	2016	S19-062
06/07/2012	Newton near Haceby Newton Village - C343 Walcott Road	Overtopping of riparian dykes. 7 Properties	Black Sluice IDB - Yes LCC - Yes	LCC proposing to replace culvert on Church Road, and the Black Sluice Internal Drainage Board/LCC are to explain further riparian duties to residents. Details of additional enforcement requirements to the east of the village have been sent to the Black Sluice Internal Drainage Board.	Yes	LCC instigated modelling works for catchment area including the village which will take account of new private protection of properties that have been carried out since enforcement letters were sent in June 2013. Proposed culvert replacement programmed. Land Drainage Consent being sort.	LCC Black Sluice IDB	On-going	Feasibility, Design & Build 2015/16/17	S19-065
23/05/2014	Dorrington Main Street	During a period of heavy rainfall this property suffered internal flooding from the lateral sewer beneath the property where water came up through the living room floor. The second event was caused by overland flow where flood water from the garden came in through the rear patio doors. 1 Property	LCC - Yes Anglian Water - Yes	Following investigations it is assumed that saturated land and heavy rainfall caused overland water to flow down the gradient to the property. The lateral sewer located beneath the property was blocked by foreign objects which caused the sewer to burst and push water up through the floor. Anglian Water investigated as to where the excess water came from and suggested that it may have gained access from the foul system through the kitchens open gulley's at the rear of the property. LCC highways are considering installing additional gullies near the property and undertake a survey of the dyke to the rear of the property to determine the outfall on the southern side of the village. Anglian Water to carry out further investigations into ensuring where possible, the excess surface water does not enter the foul water system. The Internal Drainage Board has been requested	No	LCC to consider installation of new gullies near the property. AW to carryout investigations into the foul sewer system. IDB to continue the monitoring of the dykes and enforce as required. Riparian owner to maintain the dykes and ensure they do not restrict their flow.	LCC AW IDB	On-going	Summer 2016	S19-084

Duty to Investigate
Ongoing Section 19 Investigations

Lincolnshire County Council Section 19 Investigations - Area M - Contact Officer - Mark Heaton - Area Highways Manager						Identification Actions/Works				
Date of Incident	Town & Location	Description of Flooding	Risk Management Authorities with Responsibilities and whether they are exercising functions	Actions and Recommendations	Consideration for inclusion in future Common Works Programme	Proposed Action/Works	Promoter	Status	Estimated Timescales Recommendation / Scheme Completion	S19 File Reference
29/04/2012	Belton Waterloo Cottages A607	Surface water from public highway and adjacent private land flowing onto properties. 2 Properties	LCC - Yes Upper Witham IDB - Yes Environment Agency - Yes South Kesteven District Council - Yes	Upper Witham Internal Drainage Board has carried out enforcement on riparian owner for watercourse improvements. LCC Highways is designing improvements to the drainage system.	No	New drainage system/dyke renewal (seeking funding). Improvement work designed and due to be built summer 2014. Initial works have started within the private grounds, however, highway work has been delayed due to listed building status of a drystone wall. Original solution could not be built - new solution being considered. Trash screen has been installed.	LCC	On-going	Works have commenced; estimated completion Summer 2015.	S19 - 042
28/06/2012	Carlton Scroop Main Street	Surface water run-off from private land running onto highway and entering front of cottage. 1 Property	LCC - Yes Upper Witham IDB - Yes	IDB undertaking enforcement, further LCC investigation to be carried out.	No	IDB undertaking enforcement. Further LCC investigation to be carried out. System jetted, and requires new manhole but will not be placed until other issues have been resolved.	LCC	On-going	Outstanding works due to be completed Summer 2015.	S19 - 043
06/07/2012	Harlaxton High Street	Current drainage system has insufficient capacity and backed up causing flooding to the carriageway and 2 properties. 2 Properties	LCC - Yes Upper Witham IDB - Yes Anglian Water - Yes	Following detailed investigation, joint work between LCC and Upper Witham IDB has been completed. Investigation to Mow Beck required to understand overall flood risk.	No	LCC surface water scheme completed and EA to investigate Mow Beck watercourse downstream.	LCC EA	On-going	Summer 2015	S19 - 060
06/08/2012	Caythorpe Gorse Hill Lane	Following an intense period of rain, excess surface water did not drain away fast enough from the gully at the boundary with Kings Hill. This caused surface water to flow across the carriageway and breach the verge and enter the property's driveway, subsequently overtopping the threshold causing internal flooding. 1 Property	LCC - Yes	The profile of the carriageway may cause excess surface water to miss gullies at the boundary of Kings Hill. The installation of a vehicular access built to the correct specification may also prevent further occurrences of flooding by increasing the kerb height between the carriageway and the property.	No	Further investigations of the surface water system required, possibly aided by development plans for Kings Hill. Level survey and wet weather inspection to be carried out to establish validity of highway drains. Inspections & cleansing carried out and further investigations required.	LCC	On-going	Spring 2015	S19 - 068
24/08/2015	Grantham Coxmoor Close, St Million Drive, Cavendish Way, Partnership House Withambrook	TBC - 4 properties	LCC - Yes AWA - Yes EA - Yes	Internal flooding confirmed - investigation & report BG/MH multiple location	No	Awaiting Report	LCC AWA EA	On-going		S19 - 136
24/08/2015	Barkston West Street	TBC - 1 property	TBC	Internal flooding confirmed. Initial Investigations Bryan Gault 28/8/15	No	Awaiting Report	TBC	On-going		S19 - 085 (Repeat location, addition to existing report (addendum))
24/08/2015	Long Bennington various locations within village	TBC - 23 properties	TBC	Internal flooding confirmed Multiple locations - investigation & report MH/LG		Awaiting Report	TBC	On-going		S19 - 137
24/08/2015	Westborough Town Street	TBC - 1 property	TBC	Internal flooding confirmed 10/11/15 by LG - investigations & report ongoing	No	Awaiting Report	TBC	On-going		S19 - 144
14/09/2015	Grantham Westgate	Customer called to state that yesterday in the heavy rain the shop began to get flooded. There is two drains outside that are appear to be blocked and water can't go down them. Water started to come in the property straight away, and she called the fire brigade and they attended. They pumped the water out of the property but the shop flooring is damaged. She had sandbags as this has happened on 2 occasions, but these were at her home. She has no power in the property and is loosing money to the business. 1 property	LCC	internal flooding confirmed - under investigation & report	No	Awaiting Report	TBC	On-going		S19 - 139
24/08/2015	Grantham Bridge End Road,	Date of Incident – all on the evening of 24/8/15 (all retrospective enquiries) Source of Report – Lincolnshire Fire & Rescue (F&R) Enquiry code – FL06 Flood Invest Risk to Life/Prop Detail of each report – site was attended by F&R reacting to flooding 1 property	LCC AW	Initial Investigations letter send out to resident 14/9/15 awaiting confirmation of internal flooding	No	Awaiting Report	LCC AW	On-going		S19-152
14/09/2015	Grantham Alexandra Road	TBC 1 property	TBC	Internal flooding confirmed - investigation & report.	No	Awaiting Report	TBC	On-going		S19 - 138

Duty to Investigate
Ongoing Section 19 Investigations

Lincolnshire County Council Section 19 Investigations - Network South Area N - Contact Officer- Kevin Brumfield - Area Highways Manager						Identified Actions/Works				
Date of Incident	Town & Location	Description of Flooding	Risk Management Authorities with Responsibilities and whether they are exercising functions	Actions and Recommendations	Consideration for inclusion in future Common Works Programme	Proposed Action/Works	Promoter	Status	Estimated Timescales Recommendation / Scheme Completion	S19 Report File Reference
21/11/2012	Corby Glen Irnham road	Overland flow from adjacent farm land. 1 Property	LCC - Yes	Resilience measures the property owner has taken will reduce the risk of surcharge from the private drain (non-return valve added). Works that have been undertaken by LCC Highways including jetting & CCTV of the system have identified possible improvement works, this would include additional inspection chambers and updating the system. Application for additional funding has been submitted for the installation of inspection chambers and upgrade of the sewer system.	No	Application submitted for funding to add inspection chambers and upgrade sewer system along a short section of Irnham Road.	LCC	On-going	End 2015	S19-069
22/05/2014	Bourne Beadhouse Bank	Due to heavy rainfall surface water built up on the unmade road outside the property to an extent where it flowed into the garden to the front door, at which point it entered the property. 1 Property	LCC - Yes	LCC highways are undertaking a resurfacing scheme of Beadhouse Bank, this will level the road with a cross fall towards the existing tarmac section, water will flow away from the properties towards the existing highway gully. The resident has been recommended to install a kerb line to act as a barrier between the highway and the private property. However, LCC to carry out footway improvements works in the area in 2015.	No	Resurfacing scheme to be undertaken including the construction of a kerb line between the private property and highway to act as a barrier.	LCC	On-going	End 2015	S19-080
22/05/2014	Market Deeping Stamford Road	Following heavy rainfall that fell in a short space of time; causing numerous roads and properties in the area to flood. The amount of rain that fell was excessive for the system at optimum capacity. 1 Property	LCC - Yes AW - Yes	LCC to continue to maintain the surface water system; and consider raising the footway kerbs at the front of the property. However, works to the footway may prove difficult due to conflict with a slope to the footpath away from the building and the existing height of the door threshold and damp proof course levels. Anglian Water to maintain the surface water drainage system. The property owner to maintain the rainwater systems and consider further drainage to allow the escape of water from the rear 'bund' area which is a natural water collection area.	No	Consideration by LCC have been made to lift the footpath and Kerb outside the properties to full height, to prevent water overtopping the kerb onto the footway. However there may be issues in doing this. Awaiting report from AW.	LCC AW	On-going	End 2015	S19-112
22/05/2014	Deeping St James Horsegate	Following torrential rain, excess water on the carriageway forced water to overtop the footway and enter the properties causing internal flooding to the public house. 1 Property	LCC - Yes AW - Yes WDIDB - Yes	LCC to repair blockages in highway surface water system. Welland & Deepings IDB to clear the identified blockages /diversion in their system and ensure the entry feed in the High Street is closed during weather warnings or during periods of heavy rain to ensure there is capacity for surface water two drain away. AW to maintain the surface water drainage systems with recommendation that its system diverts into the watercourse on the High Street instead of linking with the WDIDB watercourse. Resident to consider adding drainage to their exit to the driveway.	No	Maintenance work to be carried out by LCC. Property owner advised on preventative measures to protect the property. AW to clean & jet its system and divert the current system into the watercourse on the high street. its their entry feed on the High Street is closed during periods of heavy rain.	LCC AW WDIDB	On-going	End 2015	S19-105
22/05/2014	Deeping St James Horsegate	Following torrential rain, excess water on the carriageway forced water to overtop the footway and enter the properties causing internal flooding to the residential properties. 3 Properties	LCC - Yes AW - Yes WDIDB - Yes	LCC to repair blockages in highway surface water system. AW to maintain the surface water drainage systems with recommendation that its system diverts into the watercourse on the High Street instead of linking with the WDIDB watercourse. Welland & Deepings IDB to clear the identified blockages /diversion in their system and ensure the entry feed in the High Street is closed during weather warnings or during periods of heavy rain to ensure there is capacity for surface water two drain away.	No	Maintenance work to be carried out by LCC. Property owner advised on preventative measures to protect the property. AW to clean & jet its system and divert the current system into the watercourse on the high street. its their entry feed on the High Street is closed during periods of heavy rain.	LCC AW WDIDB	On-going	End 2015	S19-106

Duty to Investigate
Ongoing Section 19 Investigations

Lincolnshire County Council Section 19 Investigations - Network South Area N - Contact Officer- Kevin Brumfield - Area Highways Manager						Identified Actions/Works				
Date of Incident	Town & Location	Description of Flooding	Risk Management Authorities with Responsibilities and whether they are exercising functions	Actions and Recommendations	Consideration for inclusion in future Common Works Programme	Proposed Action/Works	Promoter	Status	Estimated Timescales Recommendation / Scheme Completion	S19 Report File Reference
22/05/2014	Market Deeping Market Place	Following torrential rain, there was excess water on the carriageway. The surface water drains were overwhelmed and when vehicles passed through the standing surface water, bow waves forced water to overtop the footway and enter the properties causing internal flooding. 1 Property	LCC - Yes AW - Yes WDIDB - Yes	LCC to carry out maintenance work on the surface water drainage system. AW to maintain utility surface drainage systems. Property owner to maintain the rainwater drainage systems and consider further drainage to allow the escape of water from the low front area.	No	Maintenance work to be carried out by LCC. Property owner advised on preventative measures to protect the property. AW to continue with regular inspections & maintenance.	LCC AW	On-going	Summer 2015	S19-107
22/05/2014	Market Deeping Market Place	Following torrential rain that fell in a short period, excess surface water on the carriageway, forced water to overtop the footway by passing vehicles and enter the property causing internal flooding. 1 Property	LCC - Yes Anglian Water - Yes	LCC to carry out maintenance work on the surface water drainage system. AW to maintain utility surface drainage systems. Property owner to maintain the rainwater drainage systems and consider further drainage to allow the escape of water from the low front area.	No	Maintenance work to be carried out by LCC. Property owner advised on preventative measures to protect the property. AW to continue with regular inspections & maintenance.	LCC AW	On-going	End 2015	S19-108
20/07/2014	Stamford Water Lane	Following a short period of heavy intense rain, surface water from the highway entered the ground floor of the property. 1 Property	LCC - Yes	LCC to undertake a drainage survey of the system this work has been programmed for 2015	No	carry out a survey of the drainage system Works are programmed during 2015.	Due to complete Summer 2015	On-going	End 2015	S19-116
08/08/2014	Uffington Casewick Lane	During a short burst of heavy rainfall, surface water entered the conservatory. 1 Property	LCC - Yes	LCC have recommended that the kerb height be increased to ensure rainwater is directed away from the property and into the gully, additional gullies will be placed along the carriageway. AW to continue to maintain their system.	No	LCC to lift the kerb height and install additional gullies. Works to commence in 2015.	LCC AW	On-going	End 2015	S19-109
10/08/2014	Stamford Northumberland Avenue	Due to heavy rainfall, and a waterlogged public open space in front of the property; excess groundwater encroached the threshold and entered the property damaging the hallway carpets and flooring. 1 Property	LCC - Yes SKDC- Yes AW - Yes	All highway surface water gullies had been cleaned out and jetted prior to the flooding incident, although we have recommended that the system have further investigations carried out in due course. It is believed the Highway surface water system was not the cause of flooding to the property other than the public open space. AW are to survey the site to ascertain whether the combined drainage system is sufficient to accommodate all the downpipe connections from the properties. SKDC to survey the Public Open Space and identify the manhole cover and determine which drainage system it is connected to and if the manhole/catchpit is clear.	No	LCC to carry out CCTV investigations of the highway drainage system. SKDC to carry out investigations of the drainage system within the public open space. AW to ascertain whether the combined drainage system is adequate to serve the properties.	LCC SKDC AW	On-going	End 2015	S19-111
04/07/2015	Tallington Bainton Road	The customer states that the main cause of flooding is water backing up and surcharging out of the four gullies in front of the property. The gullies feed into a AW sewer approximately 10-15m downstream. Water backs up and surcharges out of the gullies, which then floods the property. AW have been doing investigation into this system over the past few months 1 property	LCC / AW	The gullies are programmed to be cleaned and jetted out to ensure the system is flowing well. Due to the proximity to the level crossing a risk assessment is required to be signed off by Network Rail prior to any works commencing. Anglian Water to investigate the sewer system and inspect and service the flood gates at the property to ensure they are fit for purpose.	No	A program of gully cleansing to be carried out shortly. Also a AW to inspect and service the flood gates at the property that they installed, additionally the sewer system requires further investigations to be carried out by Anglian Water.	LCC AW	On-going	Spring 2016	S19-129

Duty to Investigate
Ongoing Section 19 Investigations

Lincolnshire County Council Section 19 Investigations - Network South Area P - Contact Officer - Andy Wharff - Area Highways Manager						Identified Action/Works				
						Proposed Action/Works	Promoter	Status	Estimated Timescales Recommendation / Scheme Completion	S19 Report File Reference
05/12/2013	Lincolnshire coastal towns and villages and various properties along inland tributaries. Various streets in Boston, Friskney, Trusthorpe, Skegness, Gibraltar Point, Tetney Marsh, Wrangle and Susworth	Following the tidal inundation over the weekend, highway, properties, businesses and high grade agricultural land suffered serious flooding. The incident occurred due to extremely high tides combined with low air pressure and onshore wind direction. Extensive damage was caused to sea defences along the East Coast and tidal tributaries inland including The River Witham Haven, Lower River Trent & River Humber. 820 Properties	Black Sluice IDB - Yes	Skegness - Following partial destruction of the stone wall at the rear of the promenade, discussions are underway with ELDC to agree partnership funding for a permanent solution based on a structural and cosmetic split. Work to construct this permanent flood wall will be undertaken under the local regeneration scheme later this year.	Yes	EA & ELDC staged approach to construction of permanent flood wall.	Shoreline management partnership approach involving: Black Sluice IDB Witham 4th IDB Sth Holland IDB EA AW BBC LCC ELDC SHDC WLDC	On-going	Complete March 2015	S19-075
			Witham 4th IDB - Yes	Boston - Preparation of the Transport and Work Act Order for the Boston Barrier Scheme for submission to the secretary of state is due to be submitted in Autumn 2015. Subject to approval, the programme for delivering a multi-functional tidal barrier includes construction to start during summer 2017 taking approximately 2.5 years for completion.	Yes	Recommendations remain current. DEFRA consulting on Environmental Assessment scope.		On-going	2017 - 2020	
			South Holland IDB - Yes	Gibraltar Point - No emergency work has been undertaken. However, the Environment Agency are looking at the future of Bulldog Bank sea defence and are reviewing the economic justification to fund its repair. If funding is not achievable alternative options will be considered.	Yes	Recommendations remain current. Mathematical model undertaken and being assessed.		On-going	TBA	
			Environment Agency - Yes	Skegness to Mablethorpe Coastline - The annual beech nourishment campaign (Lincshire) ran between April & June 2014, replenishing the material lost over the last year. Over a 20km stretch, 6 areas have been re-nourished in this years campaign.	Yes	Recommendations remain current. Salfleet to Gibraltar Point Coastal Strategy Review currently being undertaken.		On-going	TBA	
			Anglian Water - Yes	Bath Gardens - The tidal surge led to partial failure of a 10m section of a brick flood wall. Sand bags were used, not only to temporarily secure the opening, but also afterwards to protect the new brickwork against subsequent New Year high tides.	No	Recommendations remain current.		Complete	Complete	
			Boston Borough Council - Yes	Black Sluice Pumping Station - 5 diesel pumps became submerged by floodwater, causing temporary loss of power and saline intrusion to the diesel pumps and gearing mechanisms. Following maintenance work to the pumping station it has now been brought back to working order.	Yes	Recommendations remain current. Black Sluice Strategy Review being undertaken.		On-going	Summer 2018	
			Lincolnshire County Council - Yes	Slippery Gowt - Following a 40m wide breach, an immediate temporary repair was completed during December to secure the defence using sheet piling and stone. A permanent repair to improve the defence is underway.	Yes	Permanent repair work completed. Further improvement works to be undertaken following ground investigation.		Complete	Complete	
			East Lindsey District Council - Yes	Jakeman's Slip - Area downstream of Grand Sluice on the left bank of The Haven showed signs of movement following the New Year high tides. 300 tonnes of stone was placed and completed in March 2014 to prevent further slippage.	No	Recommendations remain current. Further monitoring confirmed no more work.		Complete	Complete	
			South Holland District Council - Yes	The Haven (St Ann's Wharf and White Horse Lane) - Movement of the flood wall was evident in a number of locations and a structural survey was undertaken. The flood wall was repaired along Oxford Street, and a new 30m wall constructed at White Horse Lane.	No	Recommendations remain current.		Complete	Complete	
			West Lindsey District Council - Yes	The Wash - The area south of Horseshoe Point where bank-raising is required has been identified within the Medium Term Plan for completion. Following a meeting in January 2014 to discuss the localised community emergency and flood plan (CEFP), this will include the use of flood wardens and the creation of networks to share information.	Yes	Recommendations remain current. Works still progressing in Medium Term Plan to deliver improved defences.		On-going	TBA	
			Susworth - Preventative measures for residents, including raising the top step of the footway on the river bank.	No	Raise footway.	On-going	TBA			

Duty to Investigate
Ongoing Section 19 Investigations

Lincolnshire County Council Section 19 Investigations - Network South Area R - Contact Officer - Debra Greeves - Area Highways Manager						Identified Action/Works				
Date of Incident	Town & Location	Description of Flooding	Actions and Recommendations	Consideration for inclusion in future Common Works Programme	Proposed Action/Works	Promoter	Status	Estimated Timescales Recommendation / Scheme Completion	S19 Report File Reference	
20/07/2014	Crowland Chapel Street	The road gully outside the property was unable to cope with the excessive amount of rainfall which resulted in surface water entering into the property, causing damage to the dining room and lounge. 1 Property	LCC - Yes	The drainage system has been jetted; and indicated a possible blockage within the system. Excavations have been carried out and no blockage was detected within the drainage system. Since the reported incident there has been further heavy prolonged downpours within the area with no repeat of the previous flooding incident in July. It has been concluded that the current system is slow running and the surface water was exasperated due to the excessive amount of roof water flowing onto the highway from the property opposite. Further investigations will be carried out in due course.	No	Meeting to be arranged with the owner of the property opposite to identify any amendments which could be required to their roof water disposal system. Preliminary designs undertaken for proposed alterations to LCC surface water drainage.	LCC	On-going	2016	S19-113
01/08/2013	Spalding Roman Bank	Exceptional heavy rainfall associated with highway levels and capacity of existing surface drainage system affected one property. 1 Property	LCC - Yes	Investigation concluded. S19 report sent to Floods and Water Team.	NO	Division have arranged for changes to the surface water system and carriageway surfacing to adjust levels. This is funded from divisional drainage maintenance budget. The work is programmed for April / May 2016.	LCC	On-going	2016	S19-140
October 2015	Sutton St James Chapelgate	The owner reports that this is a recurring problem that we have tried to resolve in the past. The levels are such that in heavy rain water runs onto the property from the highway down the drive into the rear garden and through the back door. There is no drainage in the property itself and what appears to have been lawn in 2003 now appears to be a hardened gravel area adding to the drainage issue.	LCC - Yes	Investigation concluded. S19 report sent to Floods and Water Team. Proposed to install a gully and adjust carriageway levels on the highway at the access to the property to collect the highway water before it enters the property.	NO	Division have arranged for changes to the surface water system and carriageway surfacing to adjust levels. This is funded from divisional drainage maintenance budget. The work is programmed for Autumn 2016.	LCC	On-going	2016	S19-141

Open Report on behalf of Richard Wills, Executive Director for Environment and Economy

Report to:	Flood Risk and Drainage Management Scrutiny Committee
Date:	26 February 2016
Subject:	GLLEP Water Management Plan & Coastal Vision

Summary:

The Greater Lincolnshire LEP has approved a Water Management Plan and is supporting the development of a coastal vision for Lincolnshire. The report provides the Committee with details of the Water Management Plan and an update on progress towards the coastal vision.

Actions Required:

To consider and comment on the Water Management Plan as detailed in Appendix A of this report.

1. Background

The Greater Lincolnshire Local Enterprise Partnership (GLLEP) has prioritised agri-food and the visitor economy as the key sectors for economic growth in Greater Lincolnshire. Effective flood risk and water resource management is considered fundamental in realising these opportunities.

The Water Management Board has overseen the development of a co-ordinated plan for action to capitalise upon existing strengths in Greater Lincolnshire and to maximise access to new funding in the interests of promoting economic growth.

The resulting Water Management Plan (Appendix A) was approved by the GLLEP Board on 28th January.

In addition, the Water Management Board has supported the development of a Coastal Vision as a framework overview to help co-ordinate initiatives and strategies in the coastal parts of Lincolnshire. The report updates Members on progress in developing the Coastal Vision.

The GLLEP Water Management Plan

Flood and Drainage Risk Management is well understood and catered for by the present partnership in the Joint Lincolnshire Flood Risk and Drainage Management Strategy and its equivalents in North Lincolnshire and North East Lincolnshire. There is currently no equivalent approach to managing issues of water supply and resources, beyond the strategic and operational responsibilities of the Water and Sewerage Companies.

A GLLEP Water Management Plan has therefore been developed in discussion with partners and a wide range of stakeholders. The purpose of the Water Management Plan is to align the well-developed flood risk agenda with a broader approach that considers water supply and management, and to support the GLLEP's objectives in promoting business sustainability and opportunities for further expansion. In particular it will act as a channel opening up access to a wider range of funding streams, through the GLLEP, to enable strategic scale flood risk and water management schemes.

The scope and broad content of the Water Management Plan has been developed through discussion with partners, elected member scrutiny, the GLLEP's Water Management Board and stakeholder workshops held in June and September 2015. The Joint Lincolnshire Flood Risk and Drainage Management Strategy Group has been engaged throughout this process, as have representatives of the North Lincolnshire and North East Lincolnshire flood risk partnerships.

The Water Management Plan takes the form of an explanatory section, followed by a table providing outline details of a programme of projects for the immediate, medium and long term. These are focused on initiatives that demonstrably facilitate economic growth, and provide a means of co-ordinating such activity across a number of important contributory strategies and plans. Its final version, appended as Annex A, was approved by the GLLEP Board on 28th January.

A Coastal Vision

Many of the issues that are relevant to the Water Management Plan, particularly the ability to make a compelling case for funding water and coastal management, are most prevalent in Greater Lincolnshire's coastal areas.

The scale and scope of flood risk and water supply, along with the attendant risks and opportunities for the visitor economy, agri-food industry and associated supply chains, are wholly interdependent in the coastal context.

For this reason, on behalf of the Water Management Board officers from partner authorities have drafted a Coastal Vision with the aim of succinctly expressing an overarching common approach to coastal issues, with a focus on achieving sustainable economic growth for the GLLEP's area.

The intention of the Coastal Vision is to draw together key themes that have emerged from a wide range of existing initiatives and prior public consultation as coherent, mutually supporting objectives for the coast. Successive drafts of the

Coastal Vision have been the subjects of comment through this and other Scrutiny Committees, alongside consultation with stakeholder and partner organisations.

As a result of this engagement, the previous draft version (draft 3.1) is currently being rewritten, with the aim of completion in March. It is anticipated that the main changes from previous drafts will be to focus more on the Lincolnshire coastal area, while linking to existing high level strategies covering the Humber Estuary.

Copies of the new draft will be provided to members and partner organisations during late February, with the aim of presenting it to Committee at the earliest opportunity thereafter.

2. Conclusion

The Water Management Plan is designed to establish a pipeline of projects that can be developed for successive rounds of funding opportunities. Approved by the GLLEP Board on 28th January, the Plan is now ready for implementation, with outline bids already in progress for priority stretches of coastal and fluvial defences.

As a result of comments received on the present draft of the Coastal Vision, the document will be focused more tightly on the Lincolnshire coast, with links to the Humber Estuary Strategy and Humber Strategic Economic Plan as an equivalent covering the Humber. It is intended that a final draft will be presented to the GLLEP Water Management Board in March, with subsequent approval by the GLLEP Board.

3. Consultation

a) Policy Proofing Actions Required

n/a

4. Appendices

These are listed below and attached at the back of the report	
Appendix A	Water Management Plan for Greater Lincolnshire

5. Background Papers

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

This report was written by David Hickman, who can be contacted on 01522 554809 or david.hickman@lincolnshire.gov.uk.

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Greater Lincolnshire Local Enterprise Partnership Water for Growth: Water Management Plan 2015 - 2040

1 Introduction

The Greater Lincolnshire Local Enterprise Partnership (GLLEP) considers the effective management of flood risk and water resources to be a critical factor in enabling economic growth in its area. The strength of existing longstanding partnership working in flood risk management in Greater Lincolnshire provides an opportunity to develop this further and to drive links with organisations responsible for water supply and management.

Our aim is for Greater Lincolnshire to be seen as a national exemplar for water management, both flood reduction and water supply, so that this plan acts as an incentive for investors in the GLLEP's priority sectors. This will enable effective water management to be a positive contributor to economic growth.

In achieving this aim, the GLLEP believes that close collaboration with the neighbouring Humber LEP, Greater Cambridgeshire and Greater Peterborough LEP and New Anglia LEP is essential, these areas sharing many important economic challenges and opportunities.

Because of this, the GLLEP has established a Water Management Board, through which it has commissioned this Water Management Plan.

2 Purpose of the Water Management Plan

The Water Management Plan

- Sets out the GLLEP's aims and objectives for water management as a driver for economic growth
- Identifies key current, emerging and future projects that will secure these aims and objectives
- Sets out the need of the water supply challenges for Greater Lincolnshire and the potential construction of major new reservoirs and/or water distribution infrastructure
- Establishes a 'pipeline' of potential bids for funding from a range of sources
- Draws on key actions set out in the three Lead Local Flood Authorities' Local Flood Risk Management Strategies where these directly contribute to economic growth
- Promotes integration between flood risk and water resource management in terms of key projects that facilitate economic growth

- Defines specific opportunities to promote co-operative ventures with neighbouring LEPS

GLLEP recognises that in addition to local, small to medium scale projects, many of which are detailed in this pipeline of projects set out later in this plan, some of the interventions which may need to be developed over the next 25 years will require large scale, long term strategic projects. This could include:

- Meeting the long term water needs of the GLLEP area (and neighbouring LEP areas as appropriate) through the construction of major new reservoirs and/or water distribution infrastructure. These projects will take many years to plan and finance and, in line with the emerging Water Resources East Anglia (WREA) programme, GLLEP is keen to explore the potential for shared water resource infrastructure which simultaneously meets the needs of domestic, industrial and agri-food users
- Projects to defend the coastline in conjunction with neighbouring LEPS and local authorities in the Humber or Wash areas to provide long term security to the large areas of coastal land, many thousands of businesses and homes in these locations.

These projects, which are likely to cost £millions to develop, are clearly of a much larger scale and will require national support and strategic commitment from multiple partners and stakeholders. GLLEP welcomes the government's creation, in late 2015, of the National Infrastructure Commission to support the development of large scale infrastructure to support growth.

GLLEP will open up a dialogue with the National Infrastructure Commission on how these major water projects could be supported and will, where appropriate, establish task and finish groups to work with stakeholders to develop larger strategic water projects.

3 Business Case: Water Management and Economic Growth

Greater Lincolnshire faces significant challenges from the risk of flooding and future availability of water. The Humber, East Anglia, Peterborough and large parts of Cambridgeshire share these challenges to a considerable degree.

Flood Risk

Greater Lincolnshire is subject to flood risk from the sea, main rivers, surface water and ground water. The extent and nature of this risk varies across the area, and is described in more detail in the Local Flood Risk Management Strategy for Lincolnshire, North Lincolnshire and North East Lincolnshire. The risk of coastal and river flooding affects up to 45% of the land area of Greater Lincolnshire, while

surface water flooding, although of more localised and limited impact, occurs more frequently and is more difficult to predict.

The key impacts on economic growth from flood risk are:

- Risk to existing economic activity
- Perceived risk impacting on the confidence to invest in the area
- Costs of recovery from flooding event
- Costs of mitigating flood risk
- Insurance costs

Water Resources

Greater Lincolnshire is within one of the driest regions of the country, and current models of climate change predict increasing scarcity of water over the 21st century. Current models also predict that whilst winter rainfall will increase, by possibly 15-20%, summer rainfall levels will fall by a similar amount. The historic reliance on summer abstraction from surface and groundwater will therefore be less sustainable in the future. Furthermore, climate models predict that we will see more frequent and longer periods of drought or flooding. In the case of drought, the increased frequency of multi-year periods of below average rainfall, is particularly difficult to respond to and will necessitate more investment in water storage for both domestic and commercial use.

Water and Sewerage Companies are addressing the impacts of this on their own operations through Water Resource Management Plans. A good example of this is provided by Anglian Water Services, whose Water Resource Management Plan can be found online through the following link.

<http://www.anglianwater.co.uk/environment/our-commitment/our-plans/water-resource-management.aspx> (especially pages 140-171 of main document)

The supply of water is clearly important for the agri-food industry, with its reliance on a plentiful and reliable supply of clean water for growing and processing foodstuffs. It also plays a major part in supporting the growth of the visitor economy, and in sustaining well-planned and appropriate housing growth.

The Role of Water Management in Growing the GLLEP Economy

The Greater Lincolnshire LEP has developed an ambitious plan to increase the value of the local economy by £3.2bn by 2023. The plan helped determine the share the Greater Lincolnshire LEP – along with the 38 other LEPs in England, received from the £2bn Single Local Growth Fund, known as the Growth Deal. To date, the LEP has been successful in securing £146m from central Government.

The Strategic Economic Plan (SEP) – also called the Growth Plan – is a business investment programme across Lincolnshire, North Lincolnshire and North East

Lincolnshire which aims to help create 13,000 new jobs, support the building of 100,000 new homes and help 22,000 businesses grow and was the basis for the Growth Deal submission and future submissions.

The Greater Lincolnshire SEP can be found on the GLLEP's website, at <http://www.greaterlincolnshirelep.co.uk/what-we-do/our-strategy-for-growth>.

The SEP focuses on growth in 3 priority sectors, all of which require a secure supply of water and protection from flooding to facilitate their growth. These sectors are:

- **Agri-Food**; Greater Lincolnshire has more grade 1 agricultural land than any other LEP in England, producing/processing over 12% of the UK's food supply, including more than 70% of its seafood and 25% of its vegetables; the sector employs more than 68,000 people across the supply chain, with a diverse mix of businesses, including Cranswick pla, Greencore, Moy Park, Walkers and Young's Seafood, alongside a wide range of primary producers. The GLLEP Agri-food Sector Plan is targeting doubling the sector's economic contribution by 2030 with a focus on high value manufacturing, increasing the production of intensive crops and livestock (eg, poultry) and investment in new areas such as aquaculture. All of these areas of growth will require additional water provision and improved water management.
- **Manufacturing and engineering**: this sector contributes over £3.3bn (20%) of Greater Lincolnshire's output, employs over 43,000 people and accounts for 42% of our exports; our manufacturing/engineering strengths encompass power engineering, petrochemicals/chemicals, steel manufacture and motorsport engineering, with global businesses including Siemens, Total, Phillips 66, Tata Steel and Pilbeam Racing Designs.
- **Visitor economy** – the visitor economy is worth over £1.3bn per annum to the Greater Lincolnshire economy, supports over 39,000 jobs and has long-term growth potential; more than 31million people visited Greater Lincolnshire's world-class visitor attractions in 2014, including Lincoln Castle and Cathedral, the Lincolnshire Wolds and the vibrant coastal resorts of Cleethorpes, Mablethorpe and Skegness – the UK's fourth most popular holiday resort.

Around 45% (2,843km²) of Greater Lincolnshire lies within the floodplain (constituting 17% of England's total floodplain area) and the area has been affected by a number of significant coastal and inland floods, most notably in 1953, 2007, 2012 and 2013.

The Greater Lincolnshire area is also one of the driest in the country and is prone to drought. The two dry winters experienced in 2010/11 and 2011/12 demonstrated the challenges and raised awareness of the need to adapt to this element of our changing climate. The second of these two dry winters was followed, from April

2012, by an exceptional summer which led to problems for our key sectors from flooding and illustrates the need to prepare for more weather extremes.

Greater Lincolnshire also contains the Ports of Immingham and Grimsby, the largest ports in the UK by tonnage as well as smaller ports in South Lincolnshire at Boston and Sutton Bridge.

A further way in which Greater Lincolnshire will grow is in terms of population. The 100,000 new homes need by 2031 to meet this growth will bring economic growth but require a strong utility structure, not least in terms of water supply and flood protection.

Security from flooding is a key infrastructure requirement for our economy. The threat of flooding affects developer confidence and development viability. Our coast, which is major part of our visitor economy, is particularly vulnerable to the impacts of climate change and sea level rise. We are committed to working with partners to secure sustainable flood risk management through the sustainable development of our coastal economy whilst protecting our communities.

These impacts are also felt inland. At Louth and Horncastle, in the Lincolnshire Wolds, risk management authorities have combined their efforts to prepare flood resilience measures against significant flood risk that affects the potential of these towns to drive growth and provide development opportunities. The LEP wishes to seize this opportunity to harness the potential of effective flood risk management to boost local growth.

Water management is therefore fundamental to the growth of Greater Lincolnshire, not only because it provides valuable services that underpin our environment, economy and quality of life, but also because of our geography.

Through developing an integrated approach to water that fully links flood risk, drainage and water-resources management, we can maximise the services it provides, including drinking water, input for business, crop irrigation, tourism and recreation and improved biodiversity. This will move us from just managing water towards managing water sustainably and will help to ensure that Greater Lincolnshire is fit for the future, improve our competitiveness and facilitate economic growth.

4 Developing the Water Management Plan

The GLLEP has developed the Water Management Plan in partnership with a wide range of stakeholders and partner organisations, shaping and refining it through workshops in June and September 2015. Stakeholders identified a number of key spheres of action which they considered fundamental in creating a more integrated, forward-looking approach to water management. In brief, these consisted of

- Increased water provision (eg additional storage capacity)

- Water use efficiency by both industry and households
- Flood risk management
- Linking flood risk management and water provision

With a focus on achieving these objectives through

- Awareness raising and education
- Increasing collaboration and focusing on new potential partnerships
- Focusing on innovation in technology, organisational arrangements, funding and planning
- New approaches to funding with a particular focus on facilitating collaborative larger scale schemes
- More joined up approaches to planning

The action plan (Annex) is being developed to identify and progress projects that will help address these areas of activity.

5 Delivery of the Water Management Plan

The importance of water management in Greater Lincolnshire, and its established expertise in managing flood risk – a key part of the solution - provides an opportunity to explore innovative approaches across the whole range of water management activities. No other part of the country is taking this comprehensive approach or has identified water management as so essential a factor in bringing about economic growth.

There are a number of existing mechanisms for progressing this approach, with flood risk management already well addressed through strong partnership arrangements across Greater Lincolnshire. In addition, in its Growth Deal, the GLLEP has already agreed a number of key principles on working with Government and its neighbouring LEPs to progress this agenda.

Known as 'freedoms and flexibilities', these principles establish how Government and the LEPs will seek to explore the best ways of securing economic growth locally. Key freedoms and flexibilities in the Greater Lincolnshire Growth Deal are:

"...the LEP and local partners will lead the development of a local consortium of partners (including the lead local flood authorities in the area, the Environment Agency and the Regional Flood and Coastal Committee, and neighbouring LEPs), who will further develop a pipeline of projects to add value to outcomes for the area through new local governance arrangements that reflect national accountability requirements."

and

"Defra will support the continuing development of a strong strategic partnership approach between the LEP, the Lincolnshire Flood Risk and Drainage Management Partnership, and the risk management authorities in the Greater Lincolnshire LEP"

area, in which the LEP will play a prominent role. The partnership will enable the LEP and local risk management authorities to determine local priorities and make decisions on the use of national and locally raised funding allocated to their area so as to give greater certainty and flexibility. Defra will welcome any evidence the LEP can provide on a) the value agricultural land and the impacts that flood management investment could have on the national economy and b) innovative ways of securing local funding, and will discuss with the LEP[s] any steps that might be taken by Government in the light of the evidence. (* ie Humber and Greater Lincolnshire)."*

Establishing a clear programme of emerging and proposed schemes as a focus for delivering enhanced water management will support these ambitions by providing partners and stakeholders with a clear focus for action and a means of co-ordinating efforts across the area. In order to promote wider co-operation across boundaries the GLLEP is also contributing to the wider Water Resource East Anglia (WREA) project, a potential route for integrating appropriate initiatives into the regulatory programmes of the industry.

As well as forming part of the WREA project's Leadership Group, the GLLEP additionally has the opportunity to shape the project's work to examine planning policy approaches that offer the best support to the delivery of identified water resources for the East of England and support sustainable growth

6 Governance, Monitoring and Reviewing the Water Management Plan

The Water Management Plan forms a discrete section within the GLLEP's Growth Strategy, providing an action plan for achieving key elements of the Strategic Economic Plan for Greater Lincolnshire, and for channelling funding available for appropriate schemes and activities through the SEP.

Governance will therefore be provided, on behalf of the GLLEP Board, by the Water Management Board, working with key established bodies such as established flood risk and drainage management partnerships and the Regional Flood and Coastal Committee. In discharging this role, the Water Management Board will be responsible for monitoring progress in delivering the Water Management Plan as a whole, although individual projects and programmes will be the responsibility of particular lead agencies, who will manage progress on these in detail.

Because the Plan covers a 25 year period it can be expected that circumstances will change and opportunities arise that will necessitate regular review of the Plan overall, while the schedule of projects and programmes will require updating on a more frequent basis. The Water Management Board will ensure that these reviews take place, and will identify the appropriate partner resources to lead and manage the process.

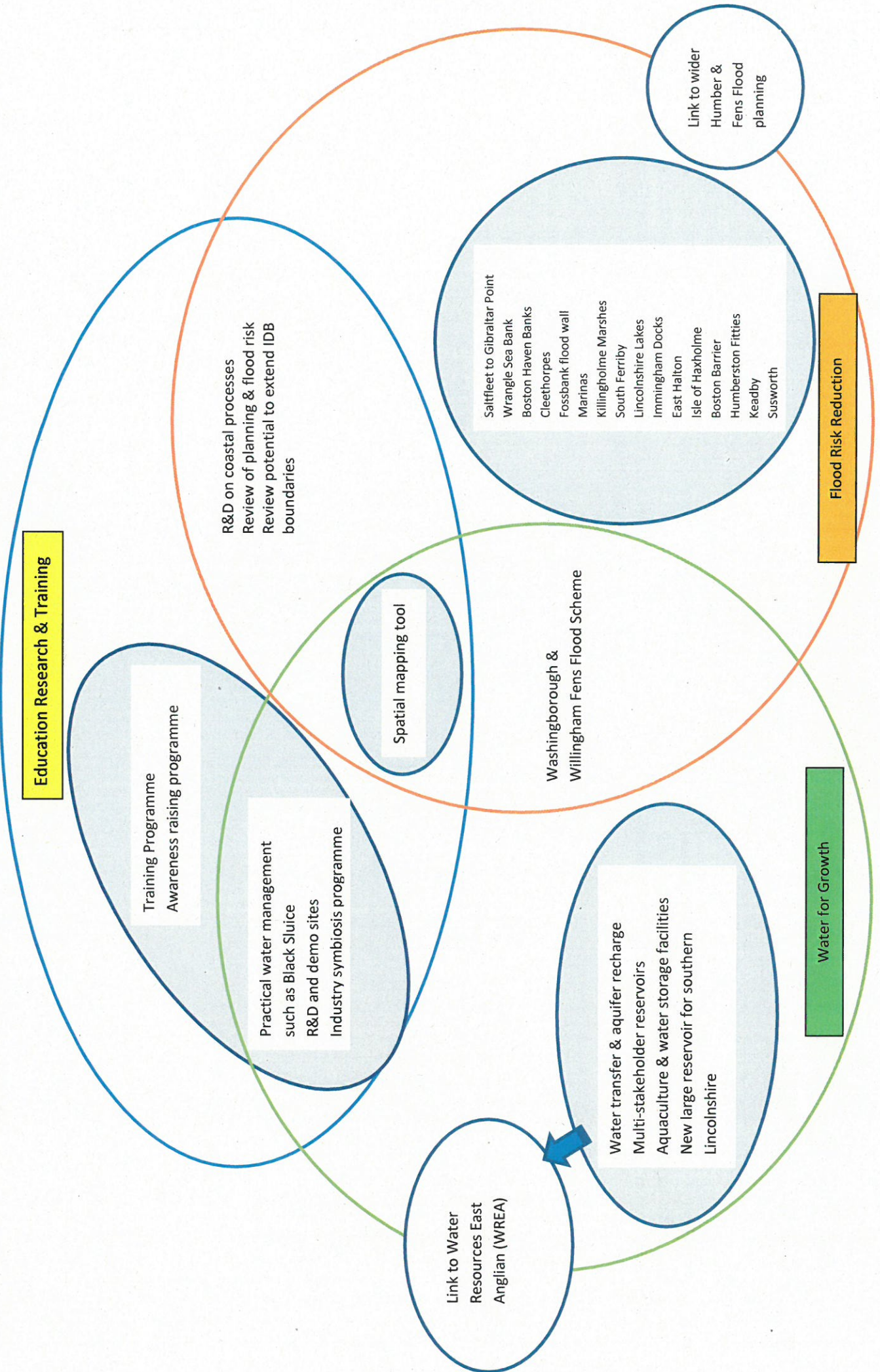
Annex: Water Management Plan – schedule of projects and programmes

The most important part of this Water Management Plan is the attached programme of proposed actions that will support economic growth through improving management of water. Stakeholders will play an important role in developing this programme by putting forward ideas for other schemes to accomplish the GLLEP's ambitions to drive a joined up agenda for water management across Greater Lincolnshire, and in partnership with neighbouring LEPs.

As the starting point for a programme intended to deliver improvements over a twenty five year period, the Water Management Plan's project schedule will be regularly reviewed and updated, with new schemes coming in and completed schemes coming out as the Plan unfolds. Revision and updating of the schedule will be managed overall by the GLLEP's Water Management Board, drawing on the expertise and resources of partner organisations and stakeholders.

Potential Water Management Schemes

Three Themes: Theme 1 – Education, Research & Training; Theme 2 – Water Provision for Growth (linked to Water Resources East Anglia); Theme 3 – Flood Risk Reduction



Theme 1 – Education, Research and Training				
Name	Timescale	Growth Benefits	Potential Funding	Leadership
<p><u>The Ark</u></p> <p>The establishment of a Centre of Excellence for Water Management incorporating a training/awareness facility for responders, business and residential community members to collectively develop relevant skills to mitigate risk from flooding and to support recovery.</p>	<p>MEDIUM 1-5 YEARS</p>	<p>Benefits arise from protection and improved recovery:</p> <ul style="list-style-type: none"> • Quick deployment of property level protection can reduce damages (75%) of insurance claims in 2007 were for contents not buildings) • Better prepared business could reduce the average claim from £112,000 and enable faster recovery. • The reduction in costs to communities and business and SROI over 5 years is anticipated to be: £15m. 	<p>£6.2m project £1.2m secured from HFRS</p> <p>Other possible funding sources:</p> <ul style="list-style-type: none"> • ERDF – PAS (Promoting climate change adaptation, risk prevention and management) • DEFRA – Climate change funds • Local levy • Loans 	<p>Initially lead by Humberside Fire and Rescue (HFRS) with development of an Executive Committee for the project to include several partners:</p> <p>LEP members, Lincolnshire FRS, Police, Local authorities, Voluntary sector, business representatives</p> <p>Responding agencies.</p> <p>Appointment of a Strategic Partner.</p>

Theme 1 – Education, Research and Training				
Name	Timescale	Growth Benefits	Potential Funding	Leadership
<p><u>Awareness Raising Programme</u></p> <p>To support and complement other aspects of the Water Management Plan. Makes links with the national curriculum.</p> <p>Looks at water supply awareness, along with potential flood incidents and to support and improve water efficiency for business/commercial and domestic purposes.</p> <p>Need further specification</p>	Medium Term		ERDF	<p>Potential commission project by the LEP.</p> <p>Some elements on farming could be led by the Uni and potentially funded through the innovation call.</p>
<p><u>Brownfield Land – streamlined planning for flood protection</u></p> <p>Initial focus was streamlining the planning process through the use of Local Development Orders to bring forward housing within the coastal zone of East Lindsey.</p> <p>The principle of bringing brownfield land back into beneficial use is supported by the govt.</p> <p>This approach could be extended to Greater Lincs with a view to understanding that brownfield resource and consideration of use for that land – housing, commercial, industrial, environmental, flood risk management (surface water).</p>	Medium Term			TBC

Theme 1 – Education, Research and Training				
Name	Timescale	Growth Benefits	Potential Funding	Leadership
<p><u>Black Sluice – R&D</u></p> <p>Future integrated water management of the Black Sluice catchment.</p> <ul style="list-style-type: none"> • This catchment provides a good, timely opportunity to test the principle of integrating flood risk and water resources. • The project could be a separate study (including a business case) that: <ul style="list-style-type: none"> - Addresses the water resource demands (now and future) of the catchment and how the current IDB pumping regime could be managed to meet this demand. - Considers water level management through Boston. - Looks to integrate ecological benefits with flood risk through the slowing the flows principles. - Identifies innovative funding and governance mechanisms. • This project would pave the way for future EU/LGF bids to deliver the capital infrastructure needed. It would also provide a template for taking a similar approach in other catchments (Lower Witham/Glens). 	<p>Short - Medium Term – political priority and WREA case study</p>	<p>Security of water supply will encourage investment in the agri-food sector. Water level management could support economic regeneration within Boston and support tourism. Done well integration of ecological benefit create natural environment tourism</p>	<p>Thinking differently. About EU funding – potential Interreg. Pilot WR Flood. IDB never but Fen Flood Risk – Water Level management. Defra Limited EA FDGIA</p>	<p>Partnership approach facilitated by the GLLEP/WMB/Lincs Floods and Drainage Strategy Group</p>

Theme 2 – Water provision for growth				
Name	Timescale	Growth Benefits	Potential Funding	Leadership
<p><u>Combined Spatial Mapping Tool</u></p> <p>To produce a detailed holistic spatial model of water use, to include both flooding and water supply and provision pressures. Existing data to be combined at a usable scale to aid in decision making process and to be supplemented by additional new modelling work where hotspots are identified so informed decisions can be made to aid in identifying growth areas. Lead Local Flood Authority and Environment Agency involvement likely as could bring benefits around flood risk planning/management.</p>		Peer Review – DIGG – Infrastructure Group to take forward		Housing and Infrastructure Group
<p><u>Practical Demonstration Sites</u></p> <p>Development of practical demonstration sites for research on water around farming, industry and housing sites in a GLEP network. To build on, and develop existing plans around agriculture to cover research across all sectors which can then provide exemplars of best practice. Agricultural element quite well progressed, industry and housing likely to be longer term.</p>	Short Term		EU bid for innovation	University of Lincoln
<p><u>Industry Applied Research and Symbiosis Programme</u></p> <p>Industry to provide and demonstrate examples of best practice with opportunities to develop a symbiosis programme around water. To look at the movement and recycling of water to make best use of the resource.</p>	Medium			

Theme 2 – Water provision for growth		Timescale	Growth Benefits	Potential Funding	Leadership
Name					
<p><u>Water Storage and Fish Farming</u></p> <p>To supply water and farm fish within 1 to 3 years through provision of reservoirs and lagoons. Aquaculture industry to be supported by Environment Agency, Natural England, NFU and Anglian Water. Likely need for permitting and abstraction licences and further detail required from this industry sector as plans emerge so most appropriate support around growth can be provided.</p>					
<p><u>Cluster Farms</u></p> <p>Support bids under the Countryside Stewardship – Natural England. Manage own water resource on a local level.</p>	Short			Countryside Stewardship Facilitation Fund Defra	Natural England LEP role to identify and communicate the opportunity
<p><u>New Reservoir for Greater Lincolnshire</u></p> <p>Linkages to be made with the Water Resources East Anglia (WREA) project for long term potential projects which may also bring benefits around biodiversity, green infrastructure and tourism</p>	Long term				Anglian Water
<p><u>Water Transfer and Aquifer Recharge</u></p> <p>To map out opportunities to link excess and deficits around water, incorporate SuDs features.</p>					Parties involved to include Internal Drainage Boards, Environment Agency, Anglian Water, Lead Local Flood Authorities and NFU.
<p><u>Multi Stakeholder Reservoirs</u></p> <p>To provide winter storage and provide water for agriculture and environmental (and possibly domestic) needs (the South Forty Foot and South Lincolnshire Fens Partnership areas with potential). Linkages to be made with the Water Resources East Anglian (WREA) project.</p>	Medium – Long (potential output of Black Sluice project)	Security of water supply will encourage investment in the agri-food sector. Done well integration of ecological benefit create natural environment tourism			Parties involved to include FWAG, Internal Drainage Boards, Environment Agency, Natural England, Wildlife Trusts, Anglian Water and NFU.

Theme 2 – Water provision for growth				
Name	Timescale	Growth Benefits	Potential Funding	Leadership
<u>Internal Drainage Board Boundaries</u> Generic proposals for the expansion to cover 100% of Greater Lincolnshire with levy rates to all land owners raising £4/5 million per year. This can then be used to fund strategic projects, but this would require Defra approval. Timescale approximately 3 years.	Medium			Devolution

Theme 3 – Flood Risk Reduction					
Name	Timescale	Growth Benefits	Potential Funding	Leadership	
<p><u>Wrangle Wash Banks Flood Scheme</u></p> <p>Deliver additional protection through the planned sea bank improvements (than that currently funded).</p> <ul style="list-style-type: none"> Following the December 2013 Tidal Surge, this area was shown to be vulnerable to erosion and overtopping with the consequence that residential properties, farm land and businesses are at an increased risk from overtopping and potential breach. Additional funding would allow increased bank raising increasing climate resilience, addressing sea level rise for the next 50 years. 	Short Term	Increased bank raising = increased investor confidence in area	Total cost = £1.5m EA FDGiA = £1m ERDF – PA5 (Promoting climate change adaptation, risk prevention and management) = £0.5m match	Witham 4 th IDB lead EA LCC	
<p><u>Haven Banks (Boston) Flood Scheme</u></p> <p>Deliver additional protection through the planned Haven Bank improvements (than that currently funded)</p> <ul style="list-style-type: none"> Following the December 2013 storm tidal surge, the Haven Banks came very close to overtopping, as a result the Haven Banks were surveyed and areas of low spots identified where banks raising is needed to achieve the required standard of protection. The consequence of these defences being overtopped leading to a breach would severely impact on the town and surrounding agricultural land. Additional funding would allow increased bank raising, increasing climate resilience, addressing sea level rise over the next 30-60 years. 	Short Term	Increased bank raising = increased investor confidence in area	Total cost =£3m EA FDGiA =£2m ERDF – PA5 (Promoting climate change adaptation, risk prevention and management) = £1m EU	LCC EA	

Theme 3 – Flood Risk Reduction				
Name	Timescale	Growth Benefits	Potential Funding	Leadership
<p><u>Sustainable Management of the open coast from Saltfleet to Gibraltar Point Flood Scheme</u></p> <p>R&D to identify, agree and plan delivery for the sustainable management of tidal flood risk following the current Lincshire Extension programme. This could involve:</p> <ul style="list-style-type: none"> • Trialling of alternative options for future coastal management strategy to inform the current review of flood risk management for future implementation. -- Exploring innovative funding - Exploring innovative governance arrangements - Agreeing an approach and implementing from 2021 - Preparing an Action Plan 	Short to Medium Term	R&D – Investor confidence. Longer term solutions – development of the coast – linked to the Coastal Vision work	Interreg – re learning about sustainable delivery and management of tidal flood risk FDGIA/ERDF for trialling of options	LCC/EA
<p><u>Boston Marina</u></p> <p>Development of an inland waterways marina including the construction of new marina basin, and associated facilities including commercial, retail and improved visitor access highly desirable to achieve wider waterway objectives improving connections and use, with inherent economic benefits</p>	Medium to Long		RDPE	BBC
<p><u>Gainsborough Marina</u></p> <p>Part of Riverside gateway brownfield development and regeneration site for residential and mixed use development and to create a marina with circa 200 berths. The marina would provide potential opportunities for flood alleviation and is highly desirable to achieve wider waterway objectives improving connections and use, with inherent economic benefits</p>	Medium to Long		RDPE	WLDC HCA LCC

Theme 3 – Flood Risk Reduction					
Name	Timescale	Growth Benefits	Potential Funding	Leadership	
<p><u>Replacement of the Fossbank floodwall, Lincoln</u></p> <p>Provide a replacement purpose built watertight defence (adjacent to the Science and Innovation Park) to resolve the seepage, washout and structural risks associated with the current defence.</p>	<p>Medium</p>	<p>Directly it will improve protection for 23 commercial properties.</p> <p>If tied in with flood risk mitigation for the Science and Innovation Park it will help improve investor confidence.</p>	<p>EA FDGiA</p> <p>Growth Deal (potential for Science and Innovation Park)</p>	<p>EA</p> <p>GLLEP/LCC/University of Lincoln (Science and Innovation Park)</p>	
<p><u>Cleethorpes Flood Scheme</u></p> <p>Improve the flood defences on the North Prom in Cleethorpes to protect businesses and residential properties that are currently not being protected.</p>	<p>Long Term (2019/20)</p> <p>The area will be resurveyed by the end of the current 6 year investment programme. At this point more information will come forward about the scale of the flood risk and the scheme that will be needed.</p>	<p>The project will help attract the businesses needed to regenerate this part of the town and will contribute to growing the visitor economy in the GLLEP area</p>	<p>£300,000 Total Scheme Cost</p> <p>FDGiA may become an option in the future along with Private Sector funding.</p> <p>LGF could accelerate project</p>	<p>North East Lincolnshire Council</p>	

Theme 3	Name	Timescale	Growth Benefits	Potential Funding	Leadership
<p><u>Washingborough and Willingham Fens Flood Scheme</u></p> <p>Delivery of multiple benefits by making space for water in Lower Witham downstream of Lincoln, involving land purchase and realignment of Witham Banks.</p> <p>The EA Witham Opportunities Study identified a number of projects that could potentially deliver flood risk benefit alongside wider benefits – a multi-functional approach. Further work demonstrated that the flood risk benefits to existing properties were minimal and therefore limited FDGiA would be available – insufficient for the EA to progress. However, other partners may wish to progress.</p> <p>Potential benefits could include: surface water attenuation for the significant growth around Lincoln (including eastern bypass), green infrastructure provision for the increased population, improved green tourism offer (supplementing Whisby Nature Park to the west and the Fens Waterway Link to the east and south), and water storage.</p>	<p>Long Term</p>	<p>Multiple Benefits</p> <p>Pilot ?? implement</p>			<p>Partners to be determined</p>
<p><u>Killingholme Marshes Drainage Improvements</u></p> <p>Construction of a pumping station and drainage solutions to facilitate further development of the South Humber Gateway (SHG). The SHG is strategically important to the region and the UK economy overall. It forms the largest area of any Enterprise Zone in the UK. It will prevent future flooding of industrial land and property, ensuring established businesses can remain and future developments to secure future inward investments can go ahead on the SHG.</p> <p>North East Lindsey Drainage Board is responsible for providing the public service in land drainage and flood protection within the specified area.</p> <p>Funding – Project Total £5,450,000</p>	<p>Short Term</p>	<p>Investor confidence.</p>	<p>ERDF Grant approval, contribution of £2,316.293 from Able Humber Ports Ltd</p>	<p>North Lincolnshire Council – also submitted to the Humber LEP ESIF Call</p>	

Theme 3 – Flood Risk Reduction				
Name	Timescale	Growth Benefits	Potential Funding	Leadership
<p><u>A1077 Highway Improvement & Flood Alleviation Scheme South Ferriby</u></p> <ul style="list-style-type: none"> • Construction of the diverted carriageway onto a suitable embankment, to be designed by NLC/EA. • Erosion is putting pressure on the need to deliver flood protection works on the frontage from South Ferriby Cliff to South Ferriby Sluice. • Flood risk reduction to the village of South Ferriby will be provided by the delivery of the proposed flood embankment towards Ferriby Cliff, around the River Ancholme sluice. 	Long Term	Flood protection for businesses and residential properties. Investor confidence. Serving dock and road.	Possible ESIF bid to be submitted depending on timescale and DfT Challenge fund	North Lincolnshire Council
<p><u>East Halton (North Killingholme) Flood Defence Scheme</u></p> <ul style="list-style-type: none"> • 2km of tidal defences improved. • 4 major existing employment sites will be safeguarded. • Nationally significant assets and infrastructure will be safeguarded. • The physical works to strengthen and improve the existing tidal defences and raise defences in line with sea level predictions to last 100 years. <p>Total Project Cost - £13,000,000</p>	Short Term	Investment confidence.	Funding Bid - £7,800,000 Public Match Funding - £4,100,000 Private Match Funding - £1,100,000	North Lincolnshire Council – also submitted to Humber LEP ESIF Call

Theme 3 – Flood Risk Reduction				
Name	Timescale	Growth Benefits	Potential Funding	Leadership
<p><u>Lincolnshire Lakes Blue & Green Infrastructure Offer</u></p> <p>This scheme will deliver the first of five lakes to kick start the transformational Lincolnshire Lakes Project. The lake will serve a multifunctional purpose, delivering a stunning waterside setting for housing, recreational opportunities and the surface water management.</p>	Short to Medium Term	The lake will be used for flood water storage to ensure safe housing development can take place	Growth Deal - £2m Private Match Funding - £3,724,401	North Lincolnshire Council
<p><u>Immingham Docks (phase 1) – replacement of the lock gates and improvements to the immediate lock frontages</u></p>	Short Term (2016)	The Port of Immingham makes a crucial contribution to economic growth throughout the Humber and North East Lincolnshire. It is vital that the port is protected from flooding as it has vital supply chains in the borough and the Humber. The scheme would also benefit residential properties in the town	£2.5m FDGiA £m Private Sector contribution £4.5m Total Scheme Cost	North East Lincolnshire Council

Theme 3 – Flood Risk Reduction					
Name	Timescale	Growth Benefit	Potential Funding	Leadership	
<p><u>Immingham Docks – 2nd Phase</u></p> <p>The Port of Immingham makes a crucial contribution to economic growth throughout the Humber and North East Lincolnshire. It is vital that the port is protected from flooding as it has vital supply chains in the borough and the Humber.</p> <p>Total Scheme Cost - £9.5m</p>	Medium Term	<p>The Port of Immingham makes a crucial contribution to economic growth throughout the Humber and North East Lincolnshire. It is vital that the port is protected from flooding as it has vital supply chains in the borough and the Humber. The scheme would also benefit residential properties in the town.</p>	<p>£3.45 ERDF</p> <p>Other funding sources identified FDGiA and LGF and Private Sector contributions</p>	<p>North East Lincolnshire Council</p> <p>Ask of ERDF</p>	
<p><u>Humberston Fitties</u></p> <p>A section of defence from the 1960s was found to have been damaged by high tides in September and October 2015 and as a result it is now failing. Other sections of defence from this time are now coming to the end of their operational life and need replacing.</p> <p>The scheme has only recently been identified and as such more work is required to further develop the proposal.</p>	Medium to Long Term	<p>Humberston Fitties is a chalet park. It is an important part of the visitor economy in Cleethorpes. Doing nothing would likely see the defences breach in 203 years which would severely damage the chalets impacting on the local economy</p>	<p>£10m Total Scheme Cost</p> <p>Funding sources identified include ERDF, FDGiA and LGF and Private Sector contributions. These need to be investigated further as the scheme develops.</p>	<p>North East Lincolnshire Council</p>	

Theme 3 - Flood Risk Reduction				
Name	Timescale	Growth Benefits	Potential Funding	Leadership
<p><u>Lower Kingsway</u></p> <p>Part of a wider regeneration programme for Cleethorpes that includes: Public realm works, improved visitor economy to the north of the resort through improved business opportunities and growth in employment.</p> <p>Flood protection – Protects the land and buildings against erosion. Can prevent coastal flooding in some areas.</p> <p>Total Scheme Cost - £3m</p>	Long Term	Investment confidence	Other funding sources identified FDGiA and LGF and Private Sector contributions. Currently sits outside the 6 year Investment Programme (Defra)	North East Lincolnshire Council
<p><u>Terminal Groyne</u></p> <p>Deteriorating condition of Terminal groyne could exacerbate damage to sea wall which could lead to a breach and resultant loss of promenade, businesses and flooding to the coastal flood plain behind.</p> <p>Replacement of the timber Terminal groyne will help maintain sand levels which in turn greatly increases the standard of protection provided by the sea walls.</p> <p>This project links with the wider regeneration of the North Prom area of Cleethorpes.</p>	Long Term	Investment Confidence, Coastal Protection	£464,000 FDGiA £15,000 Local Levy £271,000 IDB Precept	
<p><u>Boston Barrier</u></p> <p>When the barrier is built and the banks immediately downstream are raised, Boston will be protected from a tidal surge with a 0.3% annual probability (or 1 in 300 chance of happening in any one year). Unfortunately, we cannot protect against the most extreme tidal surges, but the barrier will protect Boston in most cases and give the town one of the best standards of protection against tidal flooding in the country.</p>	Short to Medium 2019		FDGiA	EA

Theme 3 – Flood Risk Reduction					
Name	Timescale	Growth Benefits	Potential Funding	Leadership	
<p><u>Western Growth Corridor</u></p> <p>The WGC is a strategically important Sustainable Urban Extension necessary to facilitate the growth of Lincoln. This development will require significant investment to manage the risk of flooding.</p>			ERDF - £28m	EA	
<p><u>Keadby Terminal Assisted Outfall (Keadby Pumping Station)</u></p> <p>Review and refurbish or replace current life-expired terminal pumping station in line with recommendations of Isle of Axholme Strategy. Options are currently being assessed to identify best solution that will:</p> <ul style="list-style-type: none"> • Reduce pumping costs • Reduce carbon footprint • Reduce management needs by improving automation • Improve resilience and reduce maintenance needs <p>Potential cost Capital Maintenance - £5m - £7m Major Capital – up to £40m</p>	Short – Medium Capital maintenance 2015-2018 Major capital 2018-2021	Flood protection for businesses and residential properties. Investor confidence.	FDGiA available. Other funding still to be identified as part of business case and delivery strategy.	EA Potential Partners IDBs NLC	
<p><u>Tidal River Trent, Susworth Defences Improvements</u></p> <p>Review and refurbishment of embankment defences alongside Tidal River Trent (East bank) with comparison against recent modelling and Tidal Trent Strategy. Objective is to maintain existing standard of defence and secure asset condition for the future.</p> <p>Potential cost up to £10.5m</p>	Medium Implementation phased 2021-24	Flood protection for businesses and residential properties. Investor confidence.	FDGiA available. Other funding still to be identified as part of business case and delivery strategy.	EA Potential Partners NLC WLDC Lincolnshire CC	

Theme 3 – Flood Risk Reduction				
Name	Timescale	Growth Benefits	Potential Funding	Leadership
<p><u>Isle of Axholme Asset Improvements, including Pumping Station Refurbishment Programme</u></p> <p>Sequential programme of works, amalgamated from individual projects proposed by EA and IDBs, to review assets and pumping stations in line with recommendations of Isle of Axholme Strategy. Optimum solutions will:</p> <ul style="list-style-type: none"> • Reduce pumping costs • Reduce carbon footprint • Identify appropriate management by sharing resources • Improve resilience and reduce maintenance needs <p>Potential cost Up to £15m phased 2015-21 Up to £200m phased over next 10-15 years</p>	<p>Medium implementation phased 2015-21</p> <p>Long implementation phased 2021-35</p>	<p>Flood protection for businesses and residential properties.</p> <p>Investor confidence.</p>	<p>FDGiA available.</p> <p>Other funding still to be identified as part of business case and delivery strategy.</p>	<p>EA & IDBs</p> <p>Potential Partners</p> <p>NLC</p> <p>WLDC</p> <p>Lincolnshire CC</p>

Open Report on behalf of Richard Wills, Director responsible for Democratic Services

Report to:	Flood and Drainage Management Scrutiny Committee
Date:	26 February 2016
Subject:	Flood and Drainage Management Scrutiny Committee Work Programme

Summary:

This item enables the Committee to consider and comment on the content of its work programme for the coming year.

Actions Required:

To consider and comment on the work programme as set out in Appendix A to this report.

1. Background

The Committee's work programme for the coming year is attached at Appendix A to this report. The Committee is invited to consider and comment on the content of the work programme.

Work Programme Definitions

Set out below are the definitions used to describe the types of scrutiny, relating to the items on the Work Programme:

Budget Scrutiny - The Committee is scrutinising the previous year's budget, or the current year's budget or proposals for the future year's budget.

Pre-Decision Scrutiny - The Committee is scrutinising a proposal, prior to a decision on the proposal by the Executive, the Executive Councillor or a senior officer.

Performance Scrutiny - The Committee is scrutinising periodic performance, issue specific performance or external inspection reports.

Policy Development - The Committee is involved in the development of policy, usually at an early stage, where a range of options are being considered.

Consultation - The Committee is responding to (or making arrangements to) respond to a consultation, either formally or informally. This includes pre-consultation engagement.

Status Report - The Committee is considering a topic for the first time where a specific issue has been raised or members wish to gain a greater understanding.

Update Report - The Committee is scrutinising an item following earlier consideration.

Scrutiny Review Activity - This includes discussion on possible scrutiny review items; finalising the scoping for the review; monitoring or interim reports; approval of the final report; and the response to the report.

2. Conclusion

To consider and comment on the Work Programme.

3. Consultation

a) Policy Proofing Actions Required

This report does not require policy proofing.

4. Appendices

These are listed below and attached at the back of the report	
Appendix A	Flood and Drainage Management Scrutiny Committee Work Programme

5. Background Papers

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

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Flood and Drainage Management Scrutiny Committee

Chairman: Councillor Lewis Strange

Vice Chairman: Councillor Mrs Victoria Ayling

26 February 2016, 10.00am		
Flood and Drainage Management Scrutiny Committee		
Item	Contributor	Purpose
The Involvement of Anglian Water in Planning Applications	Allan Simpson, Planning Services Manager; Jonathan Glerum, Flood Risk Manager, Anglian Water	Status Report
Environment Agency Update <ul style="list-style-type: none"> • Louth and Horncastle Flood Alleviation Schemes Update • Boston Barrier Update • River Steeping Update 	Deborah Campbell, Environment Agency	Update Report
River Welland Navigation	Deborah Campbell, Environment Agency	Verbal Update
Investigations held under Section 19 of the Flood and Water Management Act 2010	Mark Welsh, Flood Risk and Development Manager	Update Report
Coastal Vision and Water Management Plan	David Hickman, Environment Commissioner	Update Report

11 March 2016, 10.00am		
Environmental Scrutiny Committee		
Item	Contributor	Purpose
Capital Appraisal for Boston Household Waste Recycling Centre	Sean Kent, Group Manager Environmental Services	Pre-Decision Scrutiny, Executive Councillor: Waste and Recycling – <i>18 March 2016</i>
Low Carbon Heating Network – Progress Report	Sean Kent, Group Manager Environmental Services	Update Report
Quarter 3 Performance – 1 October to 31 December 2015	Sean Kent, Group Manager Environmental Services	Performance Scrutiny
Climate Local Action Plan Annual Report	Doug Robinson, Sustainability Team Leader	Update Report
Street Lighting Transformation Project	John Monk, Group Manager - Design Services	Update Report
Household Waste Recycling Centres – Future Challenges	Sean Kent, Group Manager Environmental Services	Information Paper

29 April 2016, 10.00am Environmental Scrutiny Committee		
Item	Contributor	Purpose
OFFSITE VISIT Louth & Horncastle Flood Alleviation Schemes / Gibraltar Point / English Coastal Path		

13 May 2016, 10.00am Flood and Drainage Management Scrutiny Committee		
Item	Contributor	Purpose
Investigations held under Section 19 of the Flood and Water Management Act 2010	Mark Welsh, Flood Risk and Development Manager	Update Report
Environment Agency Update <ul style="list-style-type: none"> • Louth and Horncastle Flood Alleviation Schemes Update • Boston Barrier Update 	Deborah Campbell, Environment Agency	Update Report
Disaster Management Update	David Powell, Emergency Planning	Update Report

10 June 2016, 10.00am Environmental Scrutiny Committee		
Item	Contributor	Purpose
Quarter 4 Performance – 1 January to 31 March 2016	Sean Kent, Group Manager Environmental Services	Performance Scrutiny
SCORE Presentations	Doug Robinson, Sustainability Team Leader	Update Report
Anglian Water Recycling Centres Update	Paul Dimpleby / Brian Kane Anglian Water	Update Report
Mixed Dry Recyclables Contract – Update	Sean Kent Group Manager Environmental Services	Update Report

29 July 2016, 10.00am		
Environmental Scrutiny Committee		
Item	Contributor	Purpose
<p>OFFSITE VISIT</p> <p>CaNeBuZo – Carbon Neutral Business Zone, Wash Frontagers' Group (WFG) Sutton Bridge Marina</p>		

Items to be scheduled – Environmental Scrutiny

- Update on Lincolnshire Energy Switch Scheme Outcome
- Update on Anaerobic Digestion Plant planning process in Lincolnshire

Items to be scheduled – Flood and Drainage Management

- Revised LRF (Local Resilience Forum) Recovery Plan
- The Flood Re-Insurance (Flood Re) Scheme – Regulations
- Insurance Industry Update – Seth Williams, Head of Public Affairs, Association of British Insurers
- Fens Waterways Link

For more information about the work of the Environmental and Flood and Drainage Management Scrutiny Committees please contact Daniel Steel, Scrutiny Officer, on 01522 552102 or by e-mail at daniel.steel@lincolnshire.gov.uk

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