

**REPORT OF THE CORPORATE DIRECTOR, PLACE
FLOOD RISK MANAGEMENT UPDATE****Purpose of the Report**

1. To provide an update on the latest position in relation to the Council's duties and responsibilities under the Flood Risk Regulations 2009 and the Flood and Water Management Act 2010, including an update on current flood mitigation measures and progress on major flood protection schemes for Member endorsement.
2. To describe the Asset Register produced under Section 21 of the Flood and Water Management Act and recommend the publication.

Information

3. Following the severe flooding in many parts of the country during the summer of 2007, the Government commissioned an independent review (the 'Pitt Review') which in 2008 recommended that local authorities should lead on the management of local flood risk, working in partnership with other organisations. Two key pieces of legislation have brought this forward; the Flood Risk Regulations 2009 which transposed the EU Floods Directive into UK Law and the Flood and Water Management Act 2010 (FWMA).
4. The Council is a Lead Local Flood Authority (LLFA) and has powers and statutory duties to manage and co-ordinate local flood risk management activities. The County Council does this by working together with other organisations including the Environment Agency, who manage flooding from generally larger rivers known as Main Rivers, such as the River Trent; Internal Drainage Boards managing low lying areas; District, Borough, Parish and Town Councils; and infrastructure/ utility providers, such as Severn Trent Water and the Highways Agency. Partnership work is overseen by Strategic Flood Risk Management Board, jointly chaired by Nottinghamshire County Council (NCC) and Nottingham City Council (NCiC) and attended by all Risk Management Authorities (RMAs).
5. Local flood risk means flooding from surface water (overland runoff), groundwater and smaller watercourses (known as Ordinary Watercourses).

General Update

6. Since becoming an LLFA Nottinghamshire County Council has worked in collaboration with colleagues, risk management authorities, partners and local communities to help reduce the risk of flooding in Nottinghamshire. A number of significant flood mitigation measures have been delivered and are planned attracting over £6.4 million of external funding investment to support our capital programme. £1.2 million of this from the Trent Regional Flood and Coastal

Committee Local Levy (to which NCC contributes and annual sum of £276k) and £5.2 million from Flood Defence Grant in Aid (FDGiA), together with considerable investment from Districts and other agencies to facilitate mitigation measures and investigations.

7. Working with local communities to develop our understanding of flood risk within their catchments has been fundamental. The communities of Hucknall, Southwell, Girton, Walkeringham, Calverton, Cropwell Butler, Newthorpe, Gunthorpe, Thurgarton, Lowdham, and Normanton on Soar, Egmanton, Mansfield and Daybrook have received a significant amount of input following flooding events. This work is allowing us to develop flood prevention schemes and secure third party funding to support subsequent scheme delivery. The work relating to each area is at various stages and an update is given later in the report. Detailed flood studies and hydraulic modelling have been funded to help understand and inform the complicated interaction of drainage catchments. Very importantly these investigations have engaged communities, improved understanding and knowledge and assisted with resilience planning.
8. Currently our capital investment programme is facilitating the delivery of 18 schemes in the County. These include a Property Flood Resilience scheme on Manvers Street in Mansfield, providing individual property protection to 8 properties and 1 business that suffered internal flooding in June 2016. In Hucknall, the installation of a new surface water system in Thoresby Dale that is designed to capture overland flows from the catchment and reduce the likelihood and impact of flooding to properties and Walkeringham has seen a £900k scheme delivered that will protect 45 houses, local community facilities and the village school from flooding.
9. In December 2016 the County Council published its Local Flood Risk Management Strategy which is a requirement of the Flood and Water Management Act 2010. The Strategy picks up flood risk locations across the County, prioritises these and puts forward appropriate actions for both high risk locations with complex flood risk issues and longer-term schemes which require investigation to be developed. For areas with lower risk we are working with communities to improve resilience. Over the last four years around 300 localised flooding investigations have been undertaken with colleagues from Highways, and Severn Trent Water. The Strategy contains an Action Plan which is currently being reviewed and will be brought back to a future Committee for approval.

Planning

10. As LLFA we have a statutory consultee role with Local Planning Authorities (LPA's) for surface water issues. Our aim is to ensure major developments are neither at risk of flooding nor increase the risk of flooding to surrounding areas. NCC took on this statutory consultee role in April 2015. The County Council as LLFA has proactively engaged with all LPA's and the Environment Agency to develop procedures, advise developers on the expectations of the Authority and assist with challenges to support the planning process. We have responded to over 1500 applications with almost 1300 of these being bespoke responses to major applications.
11. Ensuring a balance between the need for new housing and mitigating for flood risk, our performance in relation to responding to these applications within 21 days is 98% over the last year.

Section 19

12. As an LLFA we have a duty to report on flooding incidents under Section 19 of the Flood and Water Management Act 2010. At Transport and Highways Committee on 31 Oct 2013 it was approved that Section 19 Reports should be undertaken where the County Council is aware that five or more properties in a locality have been affected by internal flooding (over the threshold [doorstep level] of the property). As LLFA we have taken a view to bring Section 19 Reports to Committee once NCC have investigated the events and have a more mature understanding of the catchments rather than immediately after the event. The extended time period is used proactively to support communities, develop understanding and work collaboratively with other RMA's, partner organisations and local communities to progress from the event to a position of understanding and possible action.
13. A number of Section 19 Reports have been completed and presented at Committee. These concerned flooding in Hucknall on the 23 July 2013, Cropwell Butler on the 6 July 2012, Thurgarton on 23 July 2013, Mansfield on 10 June 2016, Gotham on 15 June 2016 and Newthorpe on the 23 July 2013. All remaining reports will be presented to Committee on the 14 June 2018. These are for Calverton, Arnold, Lowdham, Kimberley and Carlton on Trent.

Asset Register

14. Section 21 of the Flood and Water Management Act 2010 requires the Authority to maintain a register of assets affecting flood risk management and for this register to be available for inspection by the public. These structures or features are ones which the LLFA deem likely to have a significant effect on flood risk in their locality. We have been working together with Nottingham City Council over the past year on a joint Asset Register which will be publically accessible once approval is secured. The record of information held about each asset is extensive and includes what the asset is, location, type of feature, information about state of repair and ownership. All this detail however is not required to be made publically available.
15. The number of assets listed on the register are less than those maintained and on record as not all are considered to have a significant effect on flooding. It is proposed that from the data we currently hold we extract relevant entries for public viewing. These would relate to Bridges, Culverts, Historic structures, retaining walls and other drainage structures. As more information is verified the public register will be enhanced. The information that will be available to view is the location of the asset, easting and northings for plotting, if it is owned by NCC, a unique reference number that identifies it as a County or City asset and the nearest watercourse(s).
16. To promote both community partnership working and to allow cohesion and ease of transitions between our working borders for the public it is proposed that the City and County Council share the digital hosting of Asset Register information. This approach will have no additional financial implications for NCC, will allow the sharing of knowledge and experience across the authorities, remove the need for duplication of efforts and provide a complete register of information for Nottinghamshire. Nottingham City Council went live with their Asset Register in January 2018 and initial feedback has been very positive. It is expected that the main users will be the public, developers and other RMAs.

Land Drainage

17. As part of our role as LLFA we have Land Drainage duties which centre on the management of ordinary watercourses across the County, ensuring the free passage of flows through the watercourses. We have a dedicated Land Drainage Officer who spends the majority of his time on site working with landowners, members of the public and other Risk Management Authorities assisting with issues, clarifying responsibilities and identifying ways of reducing the risk of flooding.
18. We have responded to almost 400 flooding/land drainage enquiries in the last 18 months ranging from simple ownership queries to problems that have required the creation of new watercourses and removal of significant blockages. The role also includes the inspection of critical flood assets across the County and working with communities to assist in flood resilience projects. This proactive approach helps to prevent flooding.



19. As LLFA we deal with applications for Land Drainage Consents. If you wish to build a culvert or structure such as a weir on an ordinary watercourse which may affect flow or flood risk you need permission from NCC before starting the works. Consents are required for both permanent and temporary works. Over the last four years over 220 applications have been considered in line with the Land Drainage Act 1991. Some of these applications do not result in consents being necessary but do require advice and investigation.

Southwell Natural Flood Management (NFM)

20. NCC has successfully negotiated the rigorous Environment Agency National Project Assurance Board (NPAB) process to secure £350K of Local Levy Funding. NFM or 'Working with Natural Processes' (WWNP) involves techniques that aim to work with natural features and characteristics to manage the sources and pathways of flood waters. This sustainable technique can deliver other benefits alongside flood protection; benefits to the environment, society and the economy.
21. Receiving this level of funding for Natural Flood Management Projects is rare with many similar projects from other Authorities being unsuccessful. The funding will facilitate a project looking to implement Natural Flood Management (NFM) measures in the upper rural catchment of Southwell and a Sustainable Urban Drainage (SUDS) scheme on the Lowes Wong School Site in the centre of Southwell. In addition to protecting properties affected by flooding from the site we will work with the school to educate the children on this sustainable approach to water management and understanding of the environment.

22. This work will complement a larger engineered flood alleviation scheme for Southwell, which is programmed to be delivered on the ground in 2019/2020. Work to develop the scheme and have it ready for this deadline is well underway.
23. NCC are working in partnership with The Trent Rivers Trust (TRT) and the National Flood Forum (NFF) which has enabled an additional €163k European funding to be obtained from the FRAMES (Flood Resilient Areas by Multi-layer Safety Approach) project to match fund the successful NCC Local Levy bid. The project has provided two Project Officers, one to work with Land Owners in the Rural Catchment to implement NFM and the other to work in the community to help, provide advice and educate on all matters of flood resilience. This builds on existing relationships with Land Owners to help implement more features in targeted areas across the rural catchment.

Update on Flood Investigations and Schemes

Walkeringham

24. This major scheme to protect a community who were at risk of flooding was completed in May 2017. Delivered in partnership with BDC, a private contractor and Via EM this scheme sees 45 properties benefit from an increased level of protection from flooding. The £900k scheme was jointly funded by BDC, NCC and Local Levy.

Egmanton

25. Phase one of the proposals to protect the village completed in December 2016 with phase two still under development, due to difficulties concerning land ownership. This scheme is being led by the Trent Valley Internal Drainage Board with the County Council supporting the work. A substantial amount of negotiation with land owners and the community has been undertaken to enable this scheme to come to fruition.

Southwell

26. Following the submission of a complex and challenging business case the County Council secured in January 2018, £4.4m via the National Project Assurance Board (NPAB) for the delivery of a scheme to address the devastating effects of flooding on the community of Southwell. This funding included £600k from County Capital and investment from key partners. The funding will deliver engineering works to construct new flood defences across the town and Property Flood Resilience (PFR). The most vulnerable in the community will be our priority with the delivery of Individual PFR measures, for those who would still potentially flood in an event, despite other engineering measures being in place. This scheme will help to safeguard around 450 homes and businesses.

A number of drop in community events have been undertaken during the development of the business case and more are planned in March 2018. Working collaboratively with a number of agencies has enabled this scheme to navigate the difficult processes associated with scheme development of a complex catchment and assisted with maintaining confidence in the work undertaken.

Hucknall - Town Centre Scheme and Titchfield Park Brook Scheme

27. The project to deliver increased levels of flood protection to 11 properties on Thoresby Dale was completed in March this year. The project involved the installation of a new surface water system in Thoresby Dale that is designed to capture overland flows from the catchment and reduce the likelihood and impact of flooding to properties. The project is complimented by the previously completed installation of Property Flood Resilience measures, a Flood Relief Culvert and upgraded drainage system. The project cost £381k (17/18) and was funded through the Local Levy programme. Feasibility into potential flood mitigation proposals for

the Titchfield Park Brook catchment is continuing with a view to securing further funding for any economically viable proposals later this financial year. FDGiA Funding allocated: 18/19 £150k 19/20 £225k, Local Levy: 18/19 £500k.

Lowdham

28. This EA led scheme is in the national 6 year programme and secured £1.5 million of local levy funding to progress the scheme. The EA have appointed consultants to develop the Outline Business Case (OBC) for a future Lowdham scheme. The project team established includes RMA representatives, including NCC. The OBC will determine a preferred flood risk solution and take this to a design stage as well as costing the potential scheme. Along with contributions from NCC, local levy, the local community and FDGiA, approximately £3.6m is available to fund a future scheme. A future scheme will need to address the primary source of flood risk from the Cocker Beck, as well as surface water flooding. Severn Trent Water are currently looking at the relationship between foul sewer flooding and fluvial flooding to identify any potential opportunities of working in partnership should a scheme become favourable.

Boundary Brook, Stapleford

29. The funding for this scheme is currently being explored by the EA as lead RMA. In order for the scheme to progress, partnership contributions will be required. Initial work has indicated there may be less output measures than originally expected with this scheme and potentially not enough benefit to cover cost of preferred option. Currently an internal review is taking place to consider lower cost options. Following the outcome of this, it is hoped that the project may progress through to OBC.

Thurgarton

30. Trent Valley Internal Drainage Board (TVIDB) are currently finalising feasibility prior to pursuing funding for any economically viable proposals. Project feasibility and community engagement has been carried out with support from NCCs Flood Risk Management Team.

Gunthorpe

31. The County Council is working with the EA (who have the lead role) to develop proposals to protect the village from flooding. The County Council have supported the EA in taking forward the flood risk problems in Gunthorpe to an OBC. The consultants will be simultaneously developing the OBC along with the Lowdham project. The primary source of flood risk is from the River Trent and it is likely that an effective flood relief scheme will require a significant length of flood embankment. A preferred solution will be taken to design stage and costed accordingly.

Calverton

32. Following significant joint investigations between NCC and STW, feasibility work into catchment wide flood mitigation proposals is being led by STW. This work builds on the knowledge gathered by both NCC and STW and is expected to identify proposals that will reduce flood risk from a number of sources across the catchment with delivery focussed on Partnership working. Current timescales target feasibility completion 18/19 with construction dates dependant on the outcomes of the feasibility study.

Newthorpe

33. The formal Section 19 report for this catchment is complete and was approved by Communities and Place Committee on 8 February 2018. Detailed feasibility into potential flood mitigation proposals is being led by STW with support from NCC's FRM Team and has a forecast project delivery in 20/21. Project feasibility is being funded through STW and Local Levy with further Local Levy and NCC County Capital allocated for project delivery.

Girton

34. The County Council formed a partnership with the local parish council, Lincolnshire County Council, Newark and Sherwood District Council, TVIDB and the Environment Agency to produce an initial assessment report for Girton. Significant community engagement has taken place to assist progress and understanding. The initial assessment report facilitated further work to develop the detailed design for a flood defence for Girton to protect this village which suffers from Main River flooding. Any remedial scheme will be EA led and the EA are currently considering the cost benefit ratio from the feasibility work.

Arnold

35. Flooding in the Front Street area of Arnold has been an issue for many years with STW investing significant sums of money upgrading their assets in the area. Repeated localised issues led Gedling Borough Council to commission a detailed investigation into the connectivity, condition and ownership of various drainage assets and this work has now been completed. The findings will be incorporated into the wider Upper Daybrook Catchment study (see below).

Upper Daybrook Catchment

36. A total of £99k Local Levy is being used to gather a detailed understanding of the complex network of surface water assets within the Upper Daybrook catchment. This work will help ensure the assets are maintained and operated efficiently and ultimately reduce flood risk in the area. The works started on site in March 2018 and final reports will be available in July / August 2018. The Local Levy funding is split £60k (17/18) / £39k (18/19). The final report will be shared with Nottingham City FRM Team to support their investigations into flood risk in the Lower Daybrook Catchment.

Village Resilience Project

37. The flooding experienced throughout Nottinghamshire demonstrates the vulnerability of local communities to flooding. Across the county there are risks of flooding from a number of different sources including surface water runoff and ponding, groundwater, sewer surcharging, rivers and reservoirs. In some cases more than one of these sources of flooding can combine to cause a flood event and exacerbate localised flooding. In Nottinghamshire there are approximately 78,700 residential properties that could be affected by surface water flooding in an event with a 1% chance of that happening in any given year.

38. Working closely with communities provides a clearer understanding of the issues and appreciation of the community perspective of flooding. Giving communities a greater say in what activities take place and helping them to manage their own risk will result in better decisions being made and allows greater flexibility in the activities that take place. It is also vital to work in partnership with other authorities to ensure that risk is managed in a coordinated way beyond the boundaries and responsibilities of individual authorities and organisations.

39. Guided by our Local Flood Risk Management Strategy Action Plan, NCC as LLFA are developing a rolling programme that will focus on small communities who have the potential to flood in the future, helping to make these vulnerable communities more resilient by developing community flood plans, addressing riparian ownership matters, liaising with other Risk Management Authorities and facilitating other NCC colleagues to input. We in turn will develop a better understanding of historical knowledge and concerns and communities will be offered practical help, advice and guidance.

40. Initially we will be looking to identify one community in each District within Nottinghamshire. Over the next 6 months we will be updating the LLFA webpage to be a more effective interactive tool for local communities, potential developers and those who wish to be more informed and proactive with local resilience measures.

Reason/s for Recommendation/s

41. The recommendations are designed to ensure the most effective route towards identification of a cost effective flood mitigation proposal is followed.

Statutory and Policy Implications

42. The County Council has a number of new statutory duties and powers under the Flood and Water Management Act 2010 and the Flood Risk Regulations 2009 including preparation of Section 19 Reports.

43. This report has been compiled after consideration of implications in respect of crime and disorder, data protection and information governance, finance, human resources, human rights, the NHS Constitution (public health services), the public sector equality duty, safeguarding of children and adults at risk, service users, smarter working, sustainability and the environment and where such implications are material they are described below. Appropriate consultation has been undertaken and advice sought on these issues as required.

Financial Implications

44. The costs of these studies, proposals and contributions to flood risk management schemes will be contained within existing budgets. Since becoming an LLFA Nottinghamshire County Council has worked in collaboration with colleagues, risk management authorities, partners and local communities to help reduce the risk of flooding in Nottinghamshire. A number of significant flood mitigation measures have been delivered and are planned attracting over £6.4 million of external funding investment to support our capital programme. £1.2 million of this from the Trent Regional Flood and Coastal Committee Local Levy (to which NCC contributes an annual sum of £276k) and £5.2 million from Flood Defence Grant in Aid (FDGiA), together with considerable investment from Districts and other agencies to facilitate mitigation measures and investigations.

Implications for Sustainability and the Environment

45. It is anticipated that the recommendations will ultimately result in delivery of a sustainable projects that reduce flood risk across the county whilst also reducing the negative impacts the flooding has on the environment.

RECOMMENDATION/S

It is recommended that:

- 1) The Committee approves the publishing of The Nottinghamshire County Council's Asset Register in line with Section 21 of the Flood and Water Management Act 2010.
- 2) The Committee endorse the work outlined in the report.

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Corporate Director, Place

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Constitutional Comments [SJE 07/03/2018]

46. This decision falls within the Terms of Reference of the Communities & Place Committee to whom responsibility for the exercise of the Authority's functions relating to flood risk management scrutiny has been delegated.

Financial Comments [SES 27/03/2018]

47. The financial implications are set out in the report.

48. Since becoming an LLFA Nottinghamshire County Council has worked in collaboration with colleagues, risk management authorities, partners and local communities to help reduce the risk of flooding in Nottinghamshire. A number of significant flood mitigation measures have been delivered and are planned attracting over £6.4 million of external funding investment to support our capital programme. £1.2 million of this from the Trent Regional Flood and Coastal Committee Local Levy (to which NCC contributes an annual sum of £276k) and £5.2 million from Flood Defence Grant in Aid (FDGiA), together with considerable investment from Districts and other agencies to facilitate mitigation measures and investigations.

Background Papers and Published Documents

Except for previously published documents, which will be available elsewhere, the documents listed here will be available for inspection in accordance with Section 100D of the Local Government Act 1972.

- None

Electoral Division(s) and Member(s) Affected

- All