

**HERTFORDSHIRE COUNTY COUNCIL**

**GROWTH, INFRASTRUCTURE, PLANNING AND THE  
ECONOMY CABINET PANEL  
THURSDAY, 5 JULY 2018 AT 10:00AM**

Agenda Item No.

**9**

**REGIONAL FLOOD AND COASTAL COMMITTEE FUNDED PROJECTS**

Report of the Chief Executive

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Executive Member: Derrick Ashley, Growth, Infrastructure, Planning and the  
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**1. Purpose of report**

- 1.1 To inform the Cabinet Panel of the projects that have been submitted to the current Regional Flood and Coastal Committee (RFCC) 6 year programme, 2015 to 2021 and those submitted to the next RFCC 6 year programme starting in 2021.

**2. Summary**

- 2.1 Funding for flood risk management projects is administered by the Regional Flood and Coastal Committees. This includes direct funding from government called Flood and Coastal Risk Management Grant in Aid (FCRMGiA) and Local Levy funding provided by local authorities. Hertfordshire, in its function as the Lead Local Flood Authorities, can apply to the Thames and Anglian Central RFCC for funding to investigate, evaluate and eventually implement flood risk management projects.
- 2.2 Appendix 1 of this report lists the projects that the County Council has successfully submitted for funding to the current 6 year programme (2015-2021) and the next 6 year programme (2021 to 2027) along with summaries of the projects' current status. The list includes projects which are based on forecasted flood risk as well as properties that have a recorded historical flood risk. For projects to be successful and receive full funding they must demonstrate a positive cost-benefit ratio e.g. cost of scheme compared with costs avoided.
- 2.3 All current and proposed flood alleviation projects are submitted for inclusion on the 6 year programme via the Environment Agency (EA)

online portal. The application summarises the number of houses protected and the funding required for the project to be viable.

- 2.4 It is unlikely that proposed surface water flood alleviation schemes will be fully supported by government funding as the number of properties protected is usually low. There is therefore a requirement for the LLFA to secure additional funding from alternative sources to progress scheme development and implementation. This additional funding, known as partnership funding, can include funding from local communities, businesses, developers, local authorities and utility companies.
- 2.5 Evidence suggests that most projects do not make it to completion because of:
- Increasing costs throughout the project;
  - The number of protected properties being reduced in number as the hydraulic modelling is defined; and
  - The inability to raise sufficient partnership funding to secure the schemes implementation.

### **3. Recommendation**

- 3.1 That the Cabinet Panel notes the report.

### **4. Background**

- 4.1 The Flood and Water Management Act 2010 aimed to address the main concerns of Sir Michael Pitt's review of the 2007 floods. The act established upper tier authorities as Lead Local Flood Authorities (LLFAs) with responsibility for coordinating the management of local flood risk from surface runoff, groundwater and ordinary watercourses<sup>1</sup>. The County Council, in its capacity as the LLFA for Hertfordshire, compiles and maintains a flood incident record for Hertfordshire from flooding incidents reported since 2013 along with some historic records since 2000.
- 4.2 Funding for flood risk management projects in Hertfordshire is covered by Thames and Anglian (central) RFCC. Flood risk management projects bid through the relevant RFCC for inclusion on the 6 year programme with successful projects receiving allocated funding from one of two different pots, Flood and Coastal Risk Management Grant in Aid (FCRMGiA) which comes direct from national government and Local Levy. Local levy funding is provided by local authorities on an annual basis to the RFCC, this is then administered to support flood risk management projects across the RFCC area. The current levels

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<sup>1</sup> Ordinary watercourse includes every river, stream, ditch, drain, cut, dyke, sluice, sewer (other than a public sewer) which the Environment Agency has not identified as a Main River.

of levy funding provided annually by Hertfordshire are £920k to Thames RFCC and £65k to Anglian Central RFCC.

## **5. Regional Flood and Coastal Committee Funded projects in Hertfordshire**

- 5.1 Flood risk management funding is allocated through a 6 year investment programme coordinated by the Environment Agency (EA) and administered via the RFCCs.
- 5.2 The Hertfordshire LLFA has recently had the opportunity to update the Hertfordshire projects that are included on the current 6 year programme running from 2015 to 2021 and these are shown in Appendix 1. New projects recently submitted to the current programme are:
- **Chapel Lane, Long Marston:** The project is to lower the road and divert surface water runoff to a swale, which would discharge into the Tring Bourne. This is to alleviate flooding of the highway and surrounding properties. It would also assist during larger rainfall events where water is unable to drain into the culvert running through the village, due to the lack of capacity in the existing culvert.
  - **County wide Property Level Resilience (PLR) pilot project:** After several investigations and hydraulic modelling studies, traditional surface water flood alleviation schemes have been shown to be unfeasible for some areas, with the LLFA recommending property owners to install PLR at their own expense. The scope of this project is to provide up to £5k of PLR measures to 30 properties in Hertfordshire. PLR aims to make people and their property less vulnerable to the impacts of flooding. Actions that can be taken include installing flood doors, flood barriers, air brick covers, pointing or waterproofing brickwork, installing non-return valves, and moving vulnerable features such as sockets above floor level. If the pilot project is successful additional funding will be sought to extend the project.
- 5.3 The County Council has promoted projects to the six year programme based on locations where flooding has been recorded by the Council as the LLFA since its creation in 2010 or flooding has been reported by the relevant District Council. Many of these projects have had Section 19 Flood Investigations<sup>2</sup> conducted, the results of which are published on the Council's website.

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<sup>2</sup> Under Section 19 of the Flood and Water Management Act (FWMA) 2010 HCC as Lead Local Flood Authority (LLFA), on becoming aware of a flood in its area, must, to the extent that it considers it necessary or appropriate: Investigate the incident, identify the Risk Management Authorities (RMAs) with relevant flood risk management functions, establish if the relevant RMAs have responded to the flood event or are proposing to respond; publish its findings; and Inform the relevant RMAs of its findings.

- 5.4 Flooding from surface water (pluvial flooding) typically impacts fewer properties compared to flooding from rivers (fluvial flooding). Options to manage this flood risk, particularly in urban environments are difficult to identify and can be costly if urban drainage requires upgrading. Projects on the current programme, such as Robbery Bottom Lane, have failed to progress further than a hydraulic model and flood mitigation options assessment as the project has been unable to provide a positive cost-benefit score due to the low numbers of properties at risk and the high costs of providing flood defence works.
- 5.5 The funding gap between the achievable flood defence grants administered by a RFCC and the costs of implementing any flood defence schemes are in most cases too great for the scheme to proceed. Even though money has been allocated to the project, the LLFA have been unable to access the full funding allocation after detailed options assessment and hydraulic modelling has been completed. Work completed to date has indicated that the ability for the LLFA to be successful in progressing flood defence mitigation measures for areas covered by Section 19 flood investigations is limited.

## 6. Preparation and approach for the next six year programme

- 6.1 As part of the process for the next six year investment programme, the LLFA has modified its approach to funding bids to take a more strategic approach to developing projects. For the period 2021 to 2027 the LLFA will prioritise projects based on confirmed flood risk as well as predicted flood risk.
- 6.2 The projects that have been submitted to the next 6 year programme are:
- **Kings Langley:** A Kings Langley Flood Alleviation Scheme was proposed in the Surface Water Management Plan for North Hertfordshire. This includes a range of flood alleviation options that, when implemented together, will provide the maximum benefit.
  - **Welwyn Garden City & Stevenage:** Due to forecasted growth in both areas, Thames Water would like to conduct a large misconnection survey that would reduce the amount of water draining to the main trunk sewer and instead store surface water above ground, allowing it to infiltrate or discharge to rivers within the catchment.
- 6.3 Predicted flood risk is evidenced through a number of sources, such as completed Surface Water Management Plans<sup>3</sup> (SWMPs), computer

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<sup>3</sup> A SWMP is a plan which outlines the preferred surface water management strategy in a given location. In this context surface water flooding describes flooding from sewers, drains, groundwater, and runoff from land, small watercourses and ditches that occurs as a result of heavy rainfall. HCC have currently completed SWMPs for

modelling projects and the EA updated Flood Risk for Surface Water maps. Including predicted flood risk along with recorded flood risk has the potential of identifying and implementing flood alleviation options before an area has flooded. This provides a standard of protection that will assist in reducing flood risk to a larger number of properties.

- 6.4 A scheme prioritisation methodology has been developed in partnership with other Hertfordshire Risk Management Authorities and has been included in the latest Draft Local Flood Risk Management Strategy (LFRMS) for Hertfordshire. It is based on the methodology set out in the previous LFRMS and has been modified to take account of the LLFA experience from assessing potential schemes over the period 2012 to 2017. This methodology, as well as considering property related flood risk, considers aspects such as the vulnerability of people affected and the criticality of services and infrastructure to prioritise projects (See appendix 2 for the decision tree).

## **7. Financial Implications**

- 7.1 For the current six year programme there are no additional financial implications arising from projects submitted to the RFCC. However, as projects progress towards implementation there will be a requirement to fill any capital funding gaps from what is available through FCRMGiA and Local Levy. The government's expectation is that any funding shortfall should be covered with additional partnership funding.
- 7.2 Where appropriate and to progress schemes for implementation where no other external funding sources are available, the LLFA may prepare and submit bids for funding through Hertfordshire County Council's capital programme to assist in filling any identified funding gap.

## **8. Equalities Implications**

- 8.1 When considering proposals placed before Members it is important that they are fully aware of, and have themselves rigorously considered the equalities implications of the decision that they are taking
- 8.2 Rigorous consideration will ensure that proper appreciation of any potential impact of that decision on the County Council's statutory obligations under the Public Sector Equality Duty. As a minimum this requires decision makers to read and carefully consider the content of any Equalities Impact Assessment (EqIA) produced by officers.
- 8.3 The Equality Act 2010 requires the Council when exercising its functions to have due regard to the need to (a) eliminate discrimination, harassment, victimisation and other conduct prohibited under the Act;

(b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it and (c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it. The protected characteristics under the Equality Act 2010 are age; disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; race; religion and belief, sex and sexual orientation.

8.4 No EqlA was undertaken in relation to this matter as no equality implications have been identified in relation to this report.

### **Background Information**

Local Flood Risk Management Strategy for Hertfordshire, February 2014, Hertfordshire County Council.

Draft Local Flood Risk Management Strategy for Hertfordshire, 2017, Hertfordshire County Council

Thames Regional Flood and Coastal Committee, Main Committee meeting papers for 19 January 2017.

Anglian (Central) Regional Flood & Coastal Committee meeting papers for 27 April 2017.

**Appendix 1: Current and future RFCC projects<sup>4</sup>**

<b>National project number</b>	<b>Project name</b>	<b>Start Date</b>	<b>Indicative FRM allocation</b>	<b>Estimated Scheme cost</b>	<b>Partnership funding required</b>	<b>No of properties protected</b>	<b>Study Outline</b>	<b>HCC Comments</b>
<b>Current Programme 2015 - 2021 Thames RFCC</b>								
THO999F/052 A/004A	Darkes Lane Surface Water and Watercourse Flood Risk Modelling	2016	50,467	235,000	184,533	25	Darkes Lane Surface Water and Watercourse Flood Risk Modelling study	This study is ongoing and likely to deliver a final report in November 2018
THC501E/000 A/084A	Chapel Lane, Long Marston Local Drainage Flood Alleviation	2018	51,854	62,346	10,492	14	Lowering of the road to reduce pooling of water on Chapel Lane which can flood low lying properties	These figures are likely to change throughout the project. HCC have recently awarded the detailed design element to HCC Highways preferred design team
THC501E/000 A/086A	Hertfordshire County-Wide Property Level Resilience Pilot Programme	2019	128,000	180,000	52,000	30	Hertfordshire County-Wide Property Level Resilience Pilot Programme	We are hopeful of securing partnership funding through collaboration with Anglian Water and Thames Water

<sup>4</sup> The appendix is missing Anglian RFCC projects for 2021 – 2027 as the projects have not been submitted to the RFCC for review. The areas under consideration are Little Wymondley, Hitchin and Baldock

<b>National project number</b>	<b>Project name</b>	<b>Start Date</b>	<b>Indicative FRM allocation</b>	<b>Estimated Scheme cost</b>	<b>Partnership funding required</b>	<b>No of properties protected</b>	<b>Study Outline</b>	<b>HCC Comments</b>
THC501E/000 A/072A	Travellers Lane, Hatfield Flood Alleviation Scheme	2019	20,000	370,000	350,000	32	Flood alleviation scheme adjacent to Travellers Lane	Travellers Lane has suffered repeat flooding
THC500E/000 A/209A	Hertfordshire Natural Flood Management	2017	250,000	TBC	TBC	N/A	Pilot study to identify Natural Flood Risk Management alleviation options in Long Marston and Harpenden	No flooded properties have been attached to this project. As a pilot it is solely Local Levy funded
THC500E/000 A/185A	Stevenage Brook Roebuck Gate Combined Flood Risk Assessment	2016	20,000	306,517	286,517	36	Fluvial and surface water combined flood risk study	This project is being implemented into the SWMP's for efficiency savings
THC500E/000 A/030A	Knebworth Surface Water Study	2017	57,960	144,705	86,745	20	Surface water study for Knebworth	A hydraulic study report is due November 2018

<b>National project number</b>	<b>Project name</b>	<b>Start Date</b>	<b>Indicative FRM allocation</b>	<b>Estimated Scheme cost</b>	<b>Partnership funding required</b>	<b>No of properties protected</b>	<b>Study Outline</b>	<b>HCC Comments</b>
THC500E/000 A/029A	Redbourn (Rose Acre, Ridgedown, Snatchup, Lybury Lane) Surface Water Management	2015	55,000	348,000	293,000	28	Flood alleviation study in partnership with HCC Highways	These figures are likely to change throughout the project. HCC have recently awarded the detailed design element to HCC Highways preferred design team
THC018E/000 A/017A	London Colney Surface Water and Watercourse Study	2018	20,000	182,500	162,500	33	Fluvial and surface water combined flood risk study	This is now a separated project, just looking at surface water flood risk due to the EA conducting an assessment of the river independently
THC018E/000 A/016A	Rickmansworth Combined Flood Risk Study	2018	15,000	163,986	148,986	20	Fluvial and surface water combined flood risk study	This is now a separated project just looking at surface water flood risk due to the EA conducting an assessment of the river independently. This study will be included in the current SWMP

National project number	Project name	Start Date	Indicative FRM allocation	Estimated Scheme cost	Partnership funding required	No of properties protected	Study Outline	HCC Comments
<b>Current Programme 2015 - 2021 Anglian RFCC</b>								
ACO000E/000A/753A	Pix Brook Catchment Study	2017	1,698,324	1,800,000	101,676	55	Joint partnership between Central Bedfordshire Council, Internal Drainage Board (Beds) and HCC	These figures are likely to be reduced throughout the project.
<b>Future Programme 2021 - 2027 Thames RFCC</b>								
THC501E/000A/087A	Kings Langley Flood Alleviation Scheme	2022	197,999	325,000	127,001	123	Kings Langley Flood Alleviation Scheme	This assessment has been conducted at a very high level, so numbers are likely to fluctuate throughout the study
THC501E/000A/085A	Welwyn Garden City & Stevenage Flood Alleviation & SuDS Retrofit Partnership Scheme	2021	340,000	TBC	TBC	TBC	A joint partnership with Thames Water to remove surface water from the trunk sewer and store it above ground	The numbers for the project need to be assessed, however important to have it in the programme

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<b>Future Programme 2021 - 2027 Anglian RFCC</b>								
THC501E/000 A/143A	Baldock Flood Alleviation Scheme	2022	320,000	500,000	180000	105	Baldock Flood Alleviation Scheme from options recommended	This has also been submitted to Anglian Water for potential partnership funding
THC501E/000 A/149A	Little Wymondley Flood Alleviation Scheme	2022	325,000	545,000	140,000	87	Little Wymondley Flood Alleviation Scheme following a Section 19 Investigation	This has also been submitted to Anglian Water for potential partnership funding
THC501E/000 A/142A	Cambridge Road, Hitchin Flood Alleviation Scheme	2022	110,000	515,000	330000	36	Cambridge Road, Hitchin Flood Alleviation Scheme	This has also been submitted to Anglian Water for potential partnership funding
THC501E/000 A/150A	Hitchin Property Level Resilience Scheme	2022	144,000	54000	40000	24	Hitchin Property Level Resilience Scheme	This has also been submitted to Anglian Water for potential partnership funding

## Appendix 2: Decision tree to inform priority projects

