

Cambridgeshire Flood Risk Management Strategy

To: Environment & Green Investment Committee
Meeting Date: 3 March 2022
From: Steve Cox, Executive Director Place and Economy

Electoral division(s): All

Key decision: No

Forward Plan ref: n/a

Outcome: To seek members approval of Cambridgeshire's Flood Risk Management Strategy (2021-2027) following public consultation

Recommendation: The Environment and Green Investment Committee is asked to:
a) Approve the Cambridgeshire Flood Risk Management Strategy and supporting Action Plan

Officer contact:

Name: Hilary Ellis
Post: Flood Risk Business Manager
Email: hilary.ellis@cambridgeshire.gov.uk
Tel: 07500 063286

Member contacts:

Names: Councillors Lorna Dupré & Nick Gay
Post: Chair/Vice-Chair
Email: lorna.dupre@cambridgeshire.gov.uk; nick.gay@cambridgeshire.gov.uk
Tel: 01223 706398

1. Background

- 1.1 Under the Flood and Water Management Act 2010, Cambridgeshire County Council is designated as a Lead Local Flood Authority and as such has the responsibility for developing, maintaining and applying a local flood risk management strategy (LFRMS) in Cambridgeshire.
- 1.2 As presented to members of the E&GI committee in November 2021, the Council's existing LFRMS covers the period 2015-2020 and therefore requires updating. Due to Covid and the impact this had on available resource to update the strategy in 2020, the update was delayed until 2021. The updated strategy covers the period 2021-2027. The reason behind covering a 6-year period rather than 5 is to ensure the next review period ties in with the update of the National Flood and Coastal Erosion Risk Management Strategy and Anglian Flood Risk Management Plans which are due for review in 2026/27.
- 1.3 An action plan has also been prepared with input from other flood risk management partners. This accompanies the strategy document.
- 1.4 The strategy was presented to the E&GI committee in November 2021 for their endorsement for public consultation. During this meeting the committee also resolved to *'following receipt of the consultation responses, convene one or more workshops of Committee Members, to review and consider consultation responses; and receive an updated FRMS at a future meeting of Committee, prior to presenting the updated FRMS and Action Plan to full Council for approval'*. Such committee workshops were held virtually on 11 January 2022 and 9 February 2022 and were well attended by members. The presentation of the updated strategy to this meeting of the E&GI committee addresses the second part of the resolution. Since the E&GI committee meeting in November 2021, it was confirmed by Democratic Services that The Constitution states the adoption or approval of the Local Flood Risk Management Strategy for Cambridgeshire is by local choice delegated to the relevant Policy and Service Committee (i.e. the E&GI committee). This has been discussed and confirmed with the Chair of the E&GI committee and as such the strategy will not be put before Full Council as originally resolved to.
- 1.5 An action from the minutes of the committee meeting in November 2021 was to add a section into the strategy regarding property owners and residents and the ongoing responsibilities for management of ditches. A section titled 'Living next to a watercourse' is included (section 4.16) and an additional diagram showing responsibilities of ditches adjacent to highways is included in section 4.2.4. In addition to this, the Lead Local Flood Authority team is in the process of updating the riparian guidance document which will be accompanied by an awareness raising campaign supported by our communications team, the Middle Level Commissioners and district councils.

2. Main Issues

- 2.1 As previously described in our presentation to the E&GI committee in November 2021 the overall objectives of the LFRMS remain the same as the 2015-2020 strategy:
 1. Understanding flood risk in Cambridgeshire
 2. Managing the likelihood of flooding
 3. Helping Cambridgeshire's citizens to manage their own risk

- 4. Ensuring appropriate development in Cambridgeshire
- 5. Improving flood prediction, warning and post flood recovery

- 2.2 The format of the report has been adapted to make it easier to follow for the reader and aims to make a greater link between flood risk and the wider environment, including additional context in relation to policy and legislation.
- 2.3 As climate change is already happening and not something that is projected to happen in the future, it has been integrated consistently throughout the document rather than being identified in isolation.
- 2.4 As described in our last paper in November 2021, policy and legislative drivers have changed significantly since the 2015-2020 strategy was published and those relating to the wider water environment have been incorporated into the updated strategy. There is also increased importance of working across multiple disciplines to achieve our ambitions, so this has been incorporated. Examples of such working are new Council strategies (Climate Change and Environment Strategy for example), catchment partnerships and regional/strategic partnership projects such as Future Fens.
- 2.5 From the flooding that occurred in winter 2020/21, it became apparent that there needs to be much greater clarity on the roles of each flood risk management authority, so this has been incorporated into the strategy. There is also greater reference to riparian ownership and community involvement as this is important in managing flood risk on a local level.
- 2.7 An Equality Impact Assessment has been prepared with Equality, Diversity and Inclusion (EDI) colleagues. EDI topics have been built into the strategy and associated action plan to highlight some of the deprivation and isolation issues and considerations that need to be made.
- 2.8 The strategy was subject to a public consultation between 29 November 2021 and 23 January 2022 which partly coincided with the Environment Agency's Flood Risk Management Plan consultation. The consultation was promoted online via the Council's webpages and information was also shared with County Councillors, District Councillors, Parish Councils and in public buildings. Two workshops were run with members of the E&GI Committee. The first of these took place during the public consultation period to provide members with information on the structure and content of the strategy. The second workshop took place following the public consultation to provide a summary of the feedback received and the proposed amendments based on this feedback.
- 2.9 31 responses were received as part of the public consultation and these highlighted a number of consistent themes for further consideration. A summary of the themes and our resultant changes are included in the table below:

Themes/Issues raised	Actions undertaken to address issues
Request for greater reference to the natural and historic environment	Increased references made to both the natural and historic environment including the addition of a case study (Must Farm), also signposted need to consider these areas in project development.
Greater representation of	We have incorporated better signposting and connectivity to

local flooding issues	local risks and actions built into the strategy (without duplicating other documents published by partners). It is recognised that many communities are not specifically mentioned within the strategy. The communities that are mentioned are primarily those either a) where local risks have been determined through the previous version of the strategy, b) that have been subject to formal flood investigations in recent years or c) that have been identified through separate processes such as the Environment Agency's work under the Flood Risk Regulations. The strategy now includes a map of recent flood reports and details of the Flood Investigation Reports within Section 5.8.3 of the Strategy. Specific text has been incorporated for both the operations of sluice gates on the Great River Ouse and Cambridgeshire Lodes in sections 5.5.6 and 5.5.7 respectively.
Planning issues and the impact of new development on flood risk	We have developed further text relating to the risks and opportunities posed by new development, notably in relation to creating new risks (section 5.8.1).
Links to climate change and mention of sea level rise	The existing references to sea level and climate change have been made clearer and linked with related actions.
Communication with the community	There are a range of resources being developed as a part of the Community Flood Action Programme, including website improvements. In addition to this a Summary Document of this strategy is being produced using the public feedback to act as a quick reference guide and help direct the audience.
Ownership and responsibility of local assets	Work is underway to improve mapping held by partners and issues relating to changes of ownership and the potential dispersion of responsibility have been incorporated into updated text in the strategy.
Responsibilities/duties of organisations and partners	Text has been incorporated to clarify some responsibilities and confirm the County Council's Lead Local Flood Authority role as one of mediation with partners.
More information on flood action groups	More references to flood action groups have been incorporated, including within section 4.15.2 and the action plan to highlight the importance of local knowledge and some of the work already underway.
Actions and targets for combined sewers, including flooding and pollution	Many of the actions set out within the strategy related to issues in local drainage networks. This has been clarified by building on the detail in the Action Plan. We are not able to set specific targets for Water Company operations in Cambridgeshire.
Lack of detail around timescales in the action plan	The Action Plan now includes an introduction to confirm what each of the categories in that plan denote. Timescales may appear longer than expected in some instances but this is reflective of the range of interventions that may be required and the timescales associated with securing resources to deliver those interventions.

2.10 The following changes have also been made to the document:

1. Updated the strategy and action plan into the corporate font (called Program)
2. Added Foreword text
3. Added a case study of the Oxcam Property Flood Resilience Pathfinder Project (section 4.15.1)
4. Added detail and diagram around responsibilities for watercourse maintenance
5. Added a paragraph (in section 2.3.2) around where to find additional information on the 'Flood Risk Areas' defined by the Environment Agency
6. Added an additional paragraph in section 2.3.6 about how Drainage and Wastewater Management Plans (led by Anglian Water) will align with other strategies in Cambridgeshire
7. Added an additional paragraph about the update of the Council's Climate Change and Environment Strategy including signposting of where to find details of the strategy
8. Additional information added to section 5.5.8 around the Future Fens Flood Risk Management Project
9. Improved detailing of project considerations within Section 7.1.3
10. Figures and images updated with more up to date base mapping
11. Glossary added to appendix

2.11 During the public consultation and in the previous E&GI committee meeting in November 2021, the issue of updating the existing Flood and Water Supplementary Planning Document (SPD) was raised. We plan to commence this update in April 2022 with a view to completing it over the period of 12-18 months. The update will be reliant on cooperation by all local planning authorities (LPAs) in Cambridgeshire (as it is the LPAs that formally adopt the document) so the first step will be to engage with them which we plan to do in March 2022. The final publication date of the document will also be dependent on the committee timescales of the individual LPAs.

3. Alignment with corporate priorities

3.1 Communities at the heart of everything we do

The following bullet points set out details of implications identified by officers:

- The strategy recognises the value of working with communities to manage flood risk sustainably
- Community groups and the volunteers within them have a wealth of local knowledge and the strategy sets out how Cambridgeshire County Council will work with these groups to raise awareness of flooding

3.2 A good quality of life for everyone

The following bullet points set out details of implications identified by officers:

- The strategy sets out how effective local solutions can be funded within communities across Cambridgeshire to adapt and become more resilient to flood risk
- When communities understand and adapt to their risk, the adverse impacts of flooding can be minimised

3.3 Helping our children learn, develop and live life to the full
There are no significant implications for this priority

3.4 Cambridgeshire: a well-connected, safe, clean, green environment
The following bullet points set out details of implications identified by officers:

- The strategy recognises the need for risk management authorities and communities (both new and existing) to safely manage flood risk and sets out the policy and strategies to achieve this
- The strategy references national policy requiring the use of sustainable drainage systems which provide multi-functional benefits to manage flood risk whilst providing green open spaces for use by communities

3.5 Protecting and caring for those who need us
The following bullet points set out details of implications identified by officers:

- The strategy acknowledges that some areas of Cambridgeshire are the most vulnerable in the country to the ever-mounting effects of climate change and sets out the multi-partner projects which aim to not only help save these areas from inundation but also seize the opportunity to improve the economic and social prosperity of the region

4. Significant Implications

4.1 Resource Implications
There are no significant implications within this category.

4.2 Procurement/Contractual/Council Contract Procedure Rules Implications
The following bullet points set out details of significant implications identified by officers:

- Should procurements be required, they would be compliant with the Council's contract procedure rules

4.3 Statutory, Legal and Risk Implications
The following bullet points set out details of significant implications identified by officers:

- We have a statutory duty under the Part 1, Section 2 (9) of the Flood and Water Management Act 2010 to produce a Local Flood Risk Management Strategy
- The implication of failing to comply with this duty is that the county council will be in breach of a legal requirement. This could severely damage the reputation of the county council and jeopardize our position as a leading authority in flood and water management

4.4 Equality and Diversity Implications
The following bullet points set out details of significant implications identified by officers:

- A full Equality Impact Assessment has been undertaken for the production of this strategy

4.5 Engagement and Communications Implications
The following bullet points set out details of significant implications identified by officers:

- The strategy has been taken through a full public consultation following approval by the E&GI committee

4.6 Localism and Local Member Involvement

No significant implications have been identified by officers, as the strategy has been subject to public consultation allowing both residents and key stakeholders an opportunity to provide feedback on its content. Officers have also conducted two workshops with members of the E&GI committee (as set out in paragraph 2.8 of this report) and have listened to comments raised during those two events, in addition to the committee meeting in November 2021, and have incorporated changes wherever possible. In the event that changes haven't been possible officers have explained the reasoning behind this to the relevant councillors.

4.7 Public Health Implications

The following bullet points set out details of significant implications identified by officers:

- The consequences of flood risk impact on everyone, particularly the most vulnerable in society. Inappropriate or poorly designed surface water drainage infrastructure increases flood risk locally, and poorly prepared residents and communities can suffer disproportionately as a result. Therefore the county council's role as Lead local Flood Authority is critical to ensuring the preparedness and wellbeing of Cambridgeshire to meet and manage future flood threats
- The Local Flood Risk Management Strategy sets out our role, how we liaise with other Risk Management Authorities and how we work with residents and communities, especially those at greatest threat or disadvantage, to meet to minimise the risk to public health and wellbeing

4.8 Environment and Climate Change Implications on Priority Areas:

The following bullet points set out details of significant implications identified by officers:

4.8.1 Implication 1: Energy efficient, low carbon buildings.

Neutral Status:

Explanation: The strategy does not have an impact on the energy efficiency or carbon of buildings

4.8.2 Implication 2: Low carbon transport.

Neutral Status

Explanation: The strategy does not have an impact on transport

4.8.3 Implication 3: Green spaces, peatland, afforestation, habitats and land management

Positive Status:

Explanation: The strategy recognises the need to increase and enhance green spaces for the purposes of both water management and climate change adaptation

4.8.4 Implication 4: Waste Management and Tackling Plastic Pollution.

Neutral Status:

Explanation: The strategy does not have an impact on waste management

4.8.5 Implication 5: Water use, availability and management:

Positive Status:

Explanation: The strategy sets out the responsibilities of organisations in the management of water including flooding and sets actions for managing the impacts of climate change on water management

4.8.6 Implication 6: Air Pollution.

Neutral Status:

Explanation: The strategy does not have an impact on air pollution

4.8.7 Implication 7: Resilience of our services and infrastructure and supporting vulnerable people to cope with climate change.

Positive Status:

Explanation: The strategy includes information about the Community Flood Action Programme and the Future Fens projects which seek to assist vulnerable communities to adapt to climate change including flooding

Have the resource implications been cleared by Finance? Yes

Name of Financial Officer: Sarah Heywood

Have the procurement/contractual/ Council Contract Procedure Rules implications been cleared by the LGSS Head of Procurement? Yes Name of Officer: Clare Ellis

Has the impact on statutory, legal and risk implications been cleared by the Council's Monitoring Officer or LGSS Law? Yes Name of Legal Officer: Fiona McMillan

Have the equality and diversity implications been cleared by your Service Contact? Yes Name of Officer: Elsa Evans

Have any engagement and communication implications been cleared by Communications? Yes Name of Officer: Ken McErlain

Have any localism and Local Member involvement issues been cleared by your Service Contact? Yes Name of Officer: Emma Fitch

Have any Public Health implications been cleared by Public Health? Yes Name of Officer: Iain Green

If a Key decision, have any Environment and Climate Change implications been cleared by the Climate Change Officer? Yes or No Name of Officer: NA

5. Source documents

5.1 Source documents

Anglian Water (2011). Towards Sustainable Water Stewardship – Sustainable Drainage Systems Adoption Manual.

Bray, B., (2011). Image: Dancing in the Swale

CIRIA (2013). C724 - Creating Water Sensitive Places.

Department for Environment, Food and Rural Affairs (2015). Non-Statutory Technical Standards for Sustainable Drainage Systems.

Department for Environment, Food and Rural Affairs (website accessed 2015). Planning Practise Guide – Flood Risk and Coastal Change.

Department for Transport. (2013). Action for Roads - A Network for the 21st Century.

Environment Agency (Unknown). Adapting to Climate Change - Advice for Flood and Coastal Erosion Risk Management.

Environment Agency (2013). Climate change allowances for planners - Guidance to support the NPPF.

Environment Agency (2013). Living on the Edge: A Guide to your Rights and Responsibilities of Riverside Ownership.

Forestry Commission (2012). Research Report: Economic Benefits of Greenspace: a critical assessment of evidence of net economic benefits.

Ministry of Housing Communities and Local Government. (2015) Sustainable drainage systems: non-statutory technical standards

Local Authority SuDS Officer Organisation. (2015). Non-Statutory Technical Standards for Sustainable Drainage Systems – Best Practise Guidance

Met Office (accessed 2014). Flooding – Summer 2007. Retrieved from:
<http://www.metoffice.gov.uk/about-us/who/how/case-studies/summer-2007>

Natural England. (2014). Microeconomic Evidence for the Benefits of Investment in the Environment.

Saunders, Dr M.A. (1998). The UK Floods of Easter 1998 - Commissioned Report for the Benfield Greig Hazard Research Centre.

Eye Peterborough (website accessed 2021). The 1947 Flood. Retrieved from:
<http://www.eyepeterborough.co.uk/heritage/the-big-flood-of-1947/>

Cambridgeshire insight (website accessed 2021). Cambridgeshire and Peterborough Population Overview Report. Retrieved from: <https://cambridgeshireinsight.org.uk/population/>

Ministry of Housing Communities and Local Government. (2019) The Oxford-Cambridge Arc; Government Ambition and joint declarations between Government and Local Partners

Great Fen Project (website accessed 2021). Holme Fen Posts. Retrieved from:
<https://www.greatfen.org.uk/about-great-fen/heritage/holme-fen-posts>

Environment Agency. (2021) The state of the environment: the urban environment

Department for Environment, Food and Rural Affairs. (2018) Surface water management action plan – July 2018

Department for Environment, Food and Rural Affairs. (2018) A Green Future: Our 25-year plan to improve the environment

Ministry of Housing Communities and Local Government. (2014) Flood Risk and Coastal Change Planning Guidance

RSPB (website accessed 2021). Hanson-RSPB Wetland Project. Retrieved from:
<https://www.greatfen.org.uk/about-great-fen/heritage/holme-fen-posts>

Climate Change Committee. (2021) 2021 Progress report to parliament

Environment Agency. (2019) Long-term investment scenarios (LTIS) 2019

Environment Agency. (2021) National Flood Risk Assessment 2 (NaFRA 2) evidence assessment

National Infrastructure Commission. (2021) Water and Floods data

Water Resources East (website accessed 2021). Future Fens – The South Lincolnshire and Fenland Reservoirs. Retrieved from: <https://wre.org.uk/project/future-fens-the-south-lincolnshire-and-fenland-reservoirs/>

Environment Agency. (2021) Flood Risk Assessments: Climate change allowances

Environment Agency. (2021) National Flood and Coastal Erosion Risk Management Strategy for England Action Plan 2021

Ministry of Housing Communities and Local Government. (2009) Permeable surfacing of front gardens: guidance

Cambridgeshire County Council (website accessed 2021). The rights and responsibilities of a riparian owner. Retrieved from: <https://www.cambridgeshire.gov.uk/asset-library/The-rights-and-responsibilities-of-a-riparian-owner-leaflet-February-2021.pdf>

Environment Agency. (2018) Owning a watercourse

Environment Agency. (2013) Reservoir safety – Long return period rainfall

Prickwillow Museum (website accessed 2021). 1947 floods. Retrieved from: <https://www.prickwillowmuseum.com/wind-steam-and-diesel.html>

Ouse Washes A Landscape Partnership Scheme (website accessed 2021). Flooding in the Fens: 1947 Floods. Retrieved from: <https://ousewasheslps.wordpress.com/2014/02/07/flooding-in-the-fens-1947-floods/>

BBC News (website accessed 2021). Addenbrooke’s Hospital Flood prompts ‘major incident’. Retrieved from: <https://www.bbc.co.uk/news/uk-england-cambridgeshire-33564355>

Met Office (website accessed 2021). UK Climate averages. Retrieved from: <https://www.metoffice.gov.uk/research/climate/maps-and-data/uk-climate-averages/u1214qgj0>

Department for Environment, Food and Rural Affairs (2017). Schemes across the country to receive £15 million of natural flood management funding

Department for Environment, Food and Rural Affairs (2019). £2.9 million extra funding to boost action on making homes more resilient to floods

Department for Environment, Food and Rural Affairs (2020). Flood and coastal resilience innovation programme

Department for Environment, Food and Rural Affairs (2020). Government extends £5,000 grant scheme for flood hit homes

Catchment Based Approach (website accessed 2021). CaBA Partnership Support Guidance. Retrieved from: <https://catchmentbasedapproach.org/learn/caba-partnership-support-guidance/>

Association of British Insurers (2021). Modelling the impact of spending on defence maintenance on flood losses – Summary Report

Flood tool kit (website accessed 2021). Ox-Cam Pathfinder Project. Retrieved from: <https://www.floodtoolkit.com/ox-cam/>

Ministry of Housing Communities and Local Government (2021). Planning for sustainable growth in the Oxford-Cambridge Arc: an introduction to the spatial framework

The Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire (2021). The Cambridge Nature Network – Final Report.

5.2 Location

For those documents without a web link in section 5.1, copies will be held at the team's office base at New Shire Hall.