

**POLICY AND RESOURCES
COMMITTEE**

20 SEPTEMBER 2017

Is the final decision on the recommendations in this report to be made at this meeting?

Yes

FLOOD RISK ALLEVIATION - UPDATE

Final Decision-Maker	Policy & Resources Committee
Lead Director	Director of Finance & Business Improvement
Lead Officer and Report Author	Property Services Manager
Classification	Public
Wards affected	High Street, Coxheath & Hunton, Headcorn, Marden & Yalding, Staplehurst

This report makes the following recommendations to this Committee:

1. That the progress with flood alleviation schemes to be delivered by the Medway Flood Partnership be noted.

This report relates to the following corporate priorities:

Improving flood resilience impacts upon the character of the borough and supports making the borough an attractive place for all.

Timetable

Meeting	Date
Policy & Resources Committee	20 September 2017

FLOOD RISK ALLEVIATION - UPDATE

1. PURPOSE OF REPORT AND EXECUTIVE SUMMARY

- 1.1 This report updates the Committee on developments in relation to flood alleviation.
 - 1.2 The Council is working on flood alleviation as part of the Medway Flood Partnership, comprising the Environment Agency, local authorities and a range of other organisations. In the Medway confluence area, Phase 1 of the Environment Agency's 'Middle Medway Flood Resilience Scheme' is currently under way and will lead to the installation of Property-level Flood Resilience (PFR) measures for properties at very significant risk of flooding.
 - 1.3 In the Town Centre, the Maidstone Bridges Gyrotory Scheme has provided the opportunity to implement flood protection schemes. Funding is being sought for further measures to reduce the risk of flooding on the A229.
 - 1.4 Finally, preparatory work is now under way to scope the work required to increase spillway capacity at Mote Park Lake.
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2. INTRODUCTION AND BACKGROUND

- 2.1 The Medway Flood Partnership was launched in late 2016 to bring together the work of a range of organisations concerned with flood alleviation in the Medway catchment area upstream of Allington Lock. The Partnership comprises the Environment Agency, the five local authorities in the area, other relevant government agencies including Natural England and the Forestry Commission, risk management authorities including the Internal Drainage Boards and Southern Water, non-governmental organisations including the South East Rivers Trust and the National Farmers Union, and representatives of local communities from the Kent Association of Local Councils and the Joint Parishes Flood Group.
- 2.2 The Partnership's work comprises three strands – capital investment and maintenance; natural flood management; and community resilience. Capital investment and maintenance has been the main focus over the past year. The EA's initial assessment of priorities for capital investment led to development of a business case for increasing the capacity of the Leigh Flood Storage Area. Funding has now been identified for this project and construction is expected to start in 2020.
- 2.3 So far as measures in Maidstone borough are concerned, the construction of large-scale flood storage on the Rivers Beult and Teise was considered not to be viable. This conclusion was supported by independent research commissioned by Maidstone Borough Council and carried out by Arcadis early in 2017.

- 2.4 As an alternative for communities in the Medway confluence area at risk of flooding, the EA has developed a 'Middle Medway Flood Resilience Scheme'. Phase 1 of this scheme is currently in progress. It has involved carrying out scoping surveys to assess if properties at very significant risk of flooding are suitable for Property-level Flood Resilience (PFR) measures. 401 of the 454 properties surveyed are considered to be suitable for PFR measures. Of these, 41 have now been subject to a full survey, which will provide sufficient information to specify the work required and instruct a contractor. The EA hopes to engage a contractor in November 2017 to carry out this work.
- 2.5 In principle, Phase 1 can be funded from existing government funds for household flood protection.
- 2.6 If a property is not suitable for PFR measures, surveyors will assess if a community resistance option such as a low wall or embankment would be suitable. Clusters of properties which could benefit from small walls and embankments will be identified and modelling carried out to ensure that the works envisaged would not increase risk to other properties.
- 2.7 The EA is seeking partners to provide funding for this Phase 2 work. MBC has earmarked £1 million in its capital programme for flood prevention measures. KCC has committed £1.5 million that is potentially available. The EA has submitted a bid for £0.5 million to the Southern Regional Flood and Coastal Committee (SFRCC).
- 2.8 The next step will be for the Council to enter into a Partnership Funding Agreement with the EA, under which it would contribute to the costs of the proposed works. We are awaiting details of the works and will report back to Members before committing any funds.

Town Centre

- 2.9 Work relating to the Maidstone Bridges Gyratory scheme has included measures to reduce the flood risk in the Town Centre, the need for which was highlighted by the floods of Christmas/New Year 2013/14.
- 2.10 Modelling work undertaken by the Environment Agency indicated that the flooding of properties at the Lower High Street in 2013/14 was as a result of flow through the subways. As a consequence the two subways either side of the High Street have been blocked up and filled with foam concrete to remove this risk and the area re-designed to enhance the public realm. The cost for this work was £119,000.
- 2.11 In a similar fashion, the Medway Street subway also acts as a conduit for flood water to reach the lower High Street area. Members were keen to retain access to the river side through this subway and therefore a flood door was identified as a solution which would allow access to the river during normal conditions, but could be closed during periods of flood. However, as the design was developed, this option proved too costly due to its impact on the structural integrity of the subway itself. An alternative solution was identified which would be more cost effective. Glass flood barriers were scheduled to be fitted to the existing pedestrian barrier

opposite Drakes, with additional returns constructed to contain flood water. This would protect the immediate vicinity against a 75 year flood event, when used in conjunction with demountable barriers at the entrance of Old Fairmeadow with Medway Street. The cost of this work was expected to be £126,640.

2.12 However, the area requires further protection. The River Medway floods over the A229 carriageway opposite the end of Earl Street under a 75 year flood event, as well as opposite St Faith's Street. Once this floodwater fills up the A229 outside the Fremlin Walk car park, it then flows south towards the lower end of Earl Street and Medway Street. Initial discussions with the EA have indicated that a glass barrier mechanism mounted to the existing walling and spanning a 300m stretch of Fairmeadow may resolve this. Alternatively a series of demountable defences could be deployed at key points.

2.13 Unfortunately, the investigations carried out by the EA have concluded that the scheme described in 2.11, when considered in conjunction with the further risks described in 2.12, will not provide the level of protection that is required. All schemes have therefore now been put on hold pending further investigations of a feasible scheme.

2.14 The next step will be to meet the EA and KCC to agree the best approach to resolving the current impasse. The residual budget from the Maidstone Bridges Gyrotory scheme could be used to partly finance the cost of this work. However, it will be necessary to identify, in due course, further funding from the capital programme and to seek contributions from KCC. The EA are not able to contribute because the properties at risk are commercial and not residential properties.

Mote Park Lake

2.15 Mote Park Lake is classified as a reservoir under the Reservoir Act 1975. The embankment at its western end is in effect a dam, and the Council, as landowner, is responsible for minimising the risk of water overtopping the dam in extreme weather conditions. Civil engineers carrying out the regular statutory inspection of the dam advise that work is needed to reduce the change of this happening. We have recently invited quotations from suitably qualified reservoirs engineers to report on engineering options, the related costs and the preferred option. We will report back to Members when this analysis is available. This is likely to be at the January meeting of the Policy and Resources Committee.

3. AVAILABLE OPTIONS

Medway Confluence

3.1 **Option 1:** To continue to work with the EA and other partners as part of the Medway Flood Group to develop property and community level resilience in the Medway, Beult and Teise confluence area, and use the Council's budget of £1 million, in conjunction with funding from KCC and EA,

to implement viable projects for localised flood defences where PFR is not suitable.

- 3.2 **Option 2:** To remain as a member of the Medway Flood Partnership but not commit any funding for flood alleviation.

Town Centre

- 3.3 **Option 1:** To continue to work with the EA and KCC to develop a viable option to supplement the schemes being funded under the Bridges Gyratory scheme.

- 3.4 **Option 2:** To do nothing, other than complete the planned glass barriers adjacent to the subway.

Mote Park Lake

- 3.5 **Option 1:** To continue to work with engineers to develop options to minimise the risk of the dam overtopping.

- 3.6 **Option 2:** To do nothing.

4. PREFERRED OPTION AND REASONS FOR RECOMMENDATIONS

Medway Confluence

- 4.1 The preferred option is Option 1 as this is the most likely option to deliver increased flood resilience to those at highest risk and is affordable in the context of the Council's medium term financial strategy.

Town Centre

- 4.2 The preferred option is Option 1 as this will increase the level of flood protection along Fairmeadow to withstand up to a 1 in 75 year flood event.

Mote Park Lake

- 4.3 The preferred option is Option 1. The Council has a statutory obligation to ensure the safety of the Mote Park Lake dam.

5. CONSULTATION RESULTS AND PREVIOUS COMMITTEE FEEDBACK

- 5.1 Progress on flood alleviation work is reported regularly to Policy and Resources Committee. The Council also maintains regular contact with representatives of the local community, including the JPF, in relation to flooding issues.
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6. NEXT STEPS: COMMUNICATION AND IMPLEMENTATION OF THE DECISION

- 6.1 The EA will undertake surveys of properties at the highest risk and submit a business case for approval to DEFRA, which if approved will permit detailed design and construction beginning in late 2017.
- 6.2 The Council will work with KCC and the local community to develop and implement localised flood defences in conjunction with the EA's proposals for property level resilience.

7. CROSS-CUTTING ISSUES AND IMPLICATIONS

Issue	Implications	Sign-off
Impact on Corporate Priorities	The decision will impact upon the protection of the character of the borough as there will be implications for the villages and homes within the flood area. Resilience against flooding supports making the borough an attractive place for all.	Director of Finance & Business Improvement
Risk Management	Matching resources to priorities in the context of the significant pressure on the Council's resources is a major strategic risk It is essential that the Council works with other funding partners if schemes are to be delivered effectively.	Director of Finance & Business Improvement
Financial	These are covered in the report.	Director of Finance & Business Improvement
Staffing	Staff resources will be required for ongoing liaison with partners until completion of the project.	Director of Finance & Business Improvement
Legal	There may be a requirement for a bi-partite funding agreement.	Legal Team
Equality Impact Needs	The proposed solution could be	Director of

Assessment	delivered flexibly, while adjustments are possible to ensure equality. In some cases the level of benefit is dependent upon the type of property and not the resident's circumstances	Finance & Business Improvement
Environmental/Sustainable Development	The proposed solution contributes to sustainable communities.	Director of Finance & Business Improvement
Community Safety	The flooding risk has an impact on community safety. Part of the proposed solution is increased community resilience and reducing the risk to health and safety during incidences of flooding.	Director of Finance & Business Improvement
Human Rights Act	No specific impact	n/a
Procurement	No specific impact	n/a
Asset Management	No specific impact	n/a

8. REPORT APPENDICES

The following documents are to be published with this report and form part of the report:

None

9. BACKGROUND PAPERS

None.