

**FLOOD RISK ALLEVIATION - UPDATE**

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

**Executive Summary**

Maidstone Borough Council is a member of the Medway Flood Partnership, which was established in 2017 to address flood risk in the Medway catchment area above Allington Lock. This report describes initiatives currently in progress and sets out priorities for funding over the coming financial year.

**This report makes the following recommendations to this Committee:**

1. That progress be noted with flood management initiatives delivered by Maidstone Borough Council as part of the Medway Flood Partnership.
2. That £50,000 be allocated for the Natural Flood Management scheme described in paragraph 2.14 and Appendix B subject to confirmation of match funding.

**Timetable**

<b>Meeting</b>	<b>Date</b>
Policy & Resources Committee	24 March 2021

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## 1. CROSS-CUTTING ISSUES AND IMPLICATIONS

Issue	Implications	Sign-off
<b>Impact on Corporate Priorities</b>	The decision will support all four strategic plan objectives by reducing flood risk, but in particular supports that strategic priority of making the borough safe, clean and green.	Director of Finance & Business Improvement
<b>Cross Cutting Objectives</b>	The report recommendations support the objective of respecting biodiversity and environmental sustainability.	Director of Finance & Business Improvement
<b>Risk Management</b>	See paragraph 5.1.	Director of Finance & Business Improvement
<b>Financial</b>	The Council has a capital budget of £950,000 to fund the Flood Action Plan projects described in this report.	Director of Finance & Business Improvement
<b>Staffing</b>	Staffing support for flood risk alleviation and community resilience is provided by the Head of Commissioning and Business Improvement and her team.	Director of Finance & Business Improvement
<b>Legal</b>	<p>The initiatives to manage flood risk detailed in this report as proposed by the Medway Flood Partnership will enable the Council to continue to discharge its statutory duties to include the responsibilities outlined below.</p> <p>The Flood and Water Management Act 2010 gives the Environment Agency (EA) a strategic overview of the management of flood and coastal erosion risk. It also gives upper tier local</p>	Legal Team

	<p>authorities, responsibility for preparing and putting in place strategies for managing flood risk from groundwater, surface water and ordinary watercourses in their areas.</p> <p>Kent County Council as the lead local flood authority has the responsibilities referred to above.</p> <p>In addition, Maidstone Council is a risk management authority and can carry out flood risk management works on minor watercourses, working with Lead Local Flood Authorities and others, including through taking decisions on development in their area which ensure that risks are effectively managed.</p> <p>The public authorities with responsibility for flood risk management are obliged to have regard to the EA's National Flood and Coastal Erosion Risk Management Strategy for England and KCC's strategy when taking action to tackle flooding in their area.</p> <p>All risk management public authorities have a duty to co-operate with each other and to share data. to deliver flood risk management better to the benefit of their communities.</p> <p>The recommendations in this report are in accordance with the statutory obligations and the requirement for co-operation between the public authorities when discharging their functions under the 2010 Act.</p> <p>The recommendations also fall within the Policy and Resources functions, which</p>	
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	includes (1) risk management strategy; (2) emergency and resilience planning.	
<b>Privacy and Data Protection</b>	Data collected as part of projects described in this report, e.g., data about individual households affected by flooding, is processed in accordance with the Data Protection Act.	Policy and Information Manager
<b>Equalities</b>	Consideration is given to the equalities impacts as part of each individual projects.	Senior Equalities and Corporate Policy Officer
<b>Public Health</b>	The report recommendations support the public health agenda by reducing the risk of individuals being affected by flooding.	Public Health Officer
<b>Crime and Disorder</b>	Flood risk has an impact on community safety generally. The measures outlined in the report will help to achieve increased community resilience and reduce the risk to health and safety during incidences of flooding.	Director of Finance & Business Improvement
<b>Procurement</b>	Council and statutory procurement requirements will be met in relation to all procurement and commissioning carried out as part of flood risk management work.	Director of Finance & Business Improvement

## 2. INTRODUCTION AND BACKGROUND

### Background

2.1 Maidstone Borough is at the heart of the Medway catchment area. The rivers Beult, Teise and Medway join at Yalding and flow through Maidstone towards the Thames Estuary. This brings a significant risk of flooding, as was seen in the floods of winter 2013/14. Recognising that a collective approach is needed to address these risks, the Medway Flood Partnership was established in 2017. It brings together a range of organisations concerned with flood risk management and reduction in the Medway catchment area upstream of Allington Lock, including not only the Environment Agency (EA) and the principal local authorities but also a whole range of other relevant bodies. The partnership's objectives are defined as follows:

- Develop a shared understanding of the strategic challenges and opportunities within the catchment and the need for collaboration to address them
- Develop a shared action plan for the next 5 years, and a 25 year vision for the future
- Improve communications and engagement by adopting a joined up approach to engagement with communities, government and MPs
- Broker strategic solutions to problems identified through the partnership
- Identify the inter-relationships between partner projects and ensure coordination between them.

2.2 The partnership therefore provides a vital framework for developing initiatives to manage flood risk. It recognises that effective management of flood risk requires a range of different approaches, and so categorises these in three work streams, as follows:

- capital investment and maintenance
- natural flood management
- community resilience.

2.3 The partnership's report on year 3 of its work is attached as Appendix A. Initiatives of particular relevance to Maidstone borough are described below, together with a proposed new initiative for 2021/22.

### **Capital investment and maintenance**

2.4 Following the floods of winter 2013/14, extensive work was carried out to investigate the feasibility of large scale engineering solutions to flood risk. There were no schemes identified that provided viable solutions. The main capital scheme in the overall Medway Flood Partnership programme is the expansion of the Leigh Flood Storage Area, which is currently subject to a public inquiry.

### **Middle Medway Flood Resilience Scheme**

2.5 The focus over the past few years has moved to schemes that target individual properties which are at risk. Phase 1 of the Middle Medway Flood Resilience Scheme (MMFRS) has installed Property Flood Resilience (PFR) measures to 256 homes across the middle Medway villages at a cost of £1.54 million. This was funded by up to £7,500 per property through Flood Defence Grant in Aid (FDGiA), with the Southern Regional Flood and Coastal Committee (RFCC) providing an additional £195,000 to the project (Appendix A, Action 5).

2.6 As described in Appendix A, the Winter 2019/20 flooding tested the measures at some properties, successfully in many cases, but with issues identified at others. Follow up work has been undertaken and the measures have been checked and signed off with the homeowner.

- 2.7 Not all properties at very significant risk of flooding are suitable for PFR. The EA commissioned Jacobs Engineering to undertake initial assessments on properties for which property flood resilience measures are not suitable, with a view to developing small community level resilience schemes which could reduce flood risk to property. Unfortunately, none of these schemes provided value for money, mainly because the schemes proposed only assisted a few properties. The details have been shared with the property owners involved so that they can take steps at their own cost if they wish. If new community resilience measures become available they will be investigated and progressed, if appropriate.

### **Maidstone Town Centre**

- 2.8 Following flooding of properties at the lower end of the High Street in 2013/14, the two subways beneath the A229 have been blocked off. However, the Medway Street subway also acts as a conduit for flood water to reach the lower High Street area. Accordingly, as a final part of the Bridges Gyratory Scheme, a flood barrier will be built on the town side of the subway. This work has been delayed, but is now expected to be completed in 2021.

### **Mote Park Lake**

- 2.9 Following the mandatory 10 year review (under the Reservoirs Act 1975) of the Mote Park Lake reservoir in 2014, the Council received recommendations for measures in the interests of safety (MIOS). The measures advised that the spillway capacity of the lake be increased to reduce risk of failure of the dam due to overtopping, to as low as reasonably practicable (ALARP).
- 2.10 To ensure legal compliance under the Reservoirs Act, the Council commissioned the 2016 Flood Study and an ALARP assessment (April 2017) resulting in the appointment of Black & Veatch (now Binnies) Flood Engineers to act as designer to carry out an options appraisal and design development including obtaining planning consent for works to increase the spillway capacity.
- 2.11 Upon planning approval, Binnies appointment was extended to include detailed design and preparation of tender documentation for the dam works. The approved works comprise a 50m wide auxiliary spillway, on abutment formed with grass covered articulated concrete blocks and a wave wall. Breheny Civil Engineering were instructed to carry out the works and the civils works to the dam and spillway commenced April 2020 and were completed in December 2020. A MIOS certificate under Section 10(6) of the Reservoirs Act 1975 was issued by a member of the All Reservoirs Panel on 20th Dec 2020 which has been accepted by the Environment Agency ensuring that the Council's legal obligations for the works have been discharged.
- 2.12 The landscaping works surrounding the new abutment including the planting of trees and seeding grassed areas are being undertaken at present.
- 2.13 Breheny's works to the boathouse to install new automated sluice gates should commence at the end of April with completion expected late July. The works involve pouring a concrete slab under water to provide a stable platform to insert stop logs for the installation of the penstock gates.

## **Maintenance**

2.14 Maintaining watercourses, drains and sewers is essential to minimise the risk of flooding. Kent County Council is the Lead Local Flood Authority (LLFA) for the area and has the prime responsibility for co-ordinating this work. Maidstone Borough Council works closely with the relevant officers at KCC to identify and address problems in our borough. We hold a small budget of £30,000 per annum which allows us to carry out drainage works and maintenance works to ordinary watercourses. Normally these works would be the responsibility of the landowner, but in some situations it is more cost-effective to fund the work ourselves rather than relying on enforcement action (see Appendix A, Action 12).

## **Natural Flood Management**

2.15 Natural Flood Management (NFM) is the alteration, restoration or use of landscape features to reduce flood risk to properties. There are a wide range of techniques used including small 'leaky dams', new hedgerows, river bank restoration, targeted tree planting and techniques to hold water temporarily on land to 'slow the flow', reduce and delay flood peaks and store more water away from homes. As well as helping to reduce flood risk, NFM techniques also provide wider social and environmental benefits by improving the environment and wildlife for people to enjoy.

2.16 Following a previous report to Policy and Resources Committee, it was agreed to fund an NFM scheme, carried out by the South East Rivers Trust (SERT), to manage flood risk along the Hogg Stream (also known as School Stream) in Headcorn. SERT engaged with landowners in the area and obtained agreement to install NFM structures to help mitigate flooding downstream. Specifically, a flood storage pond has been created and a number of Leaky Woody Structures have been installed. These are illustrated in Appendix A, pages 16 and 18.

2.17 Building on the completion of this project, the South East Rivers Trust now proposes to carry out three further projects for the Council. Funding from the Council of £50,000 would be matched by third party funding of £180,000 that SERT can access. Details are set out in Appendix B.

## **Community Resilience**

2.18 The main agencies responsible for emergency planning, response and recovery - Kent County Council, Maidstone Borough Council and the Environment Agency - have an established framework for responding to flood incidents. This allows us to make joint decisions and respond effectively by co-ordinating operational activity and share resources and equipment. It is also essential that individual households and local communities are equipped to protect themselves and their properties.

2.19 For the area of greatest risk of flooding in Maidstone borough, at the confluence of the Medway, Beult and Teise, a 'Medway Confluence Plan' (see Appendix A, Action 40) has been developed in conjunction with Kent County

Council and the Environment Agency. This plan was activated successfully in Winter 2020/21 in dealing with two flooding incidents, as follows.

- 2.20 On 27 December 2020, Storm Bella led to flood warnings being activated for Collier Street, Yalding Village and Little Venice. The Medway Confluence Plan was activated. Sandbags were supplied by the EA to Yalding and Collier Street. MBC worked with the management of Little Venice and deployed Incident liaison Officers to the site to help with warning, informing and advising residents to leave the site before the flooding hit. As a result, over 100 occupants found alternative accommodation before the site flooded. There were road closures as a result of the flooding but no property flooding recorded. Subsequently MBC provided street sweepers to clean up affected roads in Yalding village, Collier Street and Little Venice.
- 2.21 On 19<sup>th</sup> January 2021, Storm Christoph led to flood warnings being activated for Collier Street, Yalding Village and Little Venice. The Medway Confluence Plan was activated again. Planning commenced for the possible evacuation of Little Venice. Eventually, the rainfall was not as heavy as initially expected so there was no need to evacuate Little Venice or any other location. Again, there were road closures as a result of flooding but no property flooding recorded.
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### **3. AVAILABLE OPTIONS**

- 3.1 **Option 1:** To continue to work with the EA and other partners as part of the Medway Flood Partnership and to utilise the Flood Action Plan capital budget for schemes that meet the objectives of the Partnership and the Council's own investment criteria.
- 3.2 **Option 2:** To remain as a member of the Medway Flood Partnership but not commit any funding for flood risk management.
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### **4. PREFERRED OPTION AND REASONS FOR RECOMMENDATIONS**

- 4.1 The preferred option is Option 1 as this is the most likely option to deliver reductions in flood risk and is affordable in the context of the Council's medium term financial strategy.
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### **5. RISK**

- 5.1 This report deals with the broad risk to the community posed by flooding. Risks associated with projects described in the report are addressed at the level of the individual project.
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## **6. CONSULTATION RESULTS AND PREVIOUS COMMITTEE FEEDBACK**

- 5.1 Progress on flood risk management work is reported to Policy and Resources Committee. The Council also maintains regular contact with representatives of the local community, including parish councillors, in relation to flooding issues.
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## **7. NEXT STEPS: COMMUNICATION AND IMPLEMENTATION OF THE DECISION**

- 7.1 The Council will continue to work with the Medway Flood Partnership in implementing the actions described in the report.
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## **8. REPORT APPENDICES**

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

Appendix A: Medway Flood Action Plan – Year 3 Report

Appendix B: Proposed Natural Flood Management Schemes 2021-22

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## **9. BACKGROUND PAPERS**

None.