Report for: Cabinet – 18th April 2023.

Title: Flood Water Management Investment Plan (FWMIP) 2023/24

Report authorised by Barry Francis, Director of Environment and Resident Experience

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Ward(s) affected: All

Report for Key/ Non-Key Decision: Key Decision

1 Describe the issue under consideration.

1.1 Haringey, like many London Boroughs is vulnerable to surface water flooding. Our urban environment has reduced natural drainage. Heavy rainfall can swiftly overwhelm the drainage network, quickly leading to flooding of low-lying areas.

1.2 Intense rainfall events are becoming more frequent. Haringey, as well as other London boroughs, experienced flooding from extreme rainfall in July 2021 and August 2022. Climate change is projected to increase the frequency and intensity of heavy rainfall, in turn increasing the risk of flooding.

1.3 As the 'lead local flood authority' (LLFA), the Council, working in partnership with the Environment Agency, Thames Water and other stakeholders, is responsible for managing the risk of flooding from surface water, groundwater, and some of the culverted watercourses.

1.4 It is not possible to completely stop flooding, but steps can be taken to reduce the effect through measures including that of highways drainage resilience works and schemes to prevent unmanaged flooding

1.5 This report sets out the Council's Flood Water Management Investment Plan (FWMIP) capital programme and interventions for 2023/2024 and the context in which that programme has been developed. Appendix 1 sets out the proposed allocation of schemes within the overall programme. Those schemes are a 'living document' of proposals which are developed as the Council understands the various issues that have an impact on flooding across the Borough.

2 Cabinet Member Introduction

2.1 I am pleased to introduce this report which sets out the investment plan in flood reduction and drainage improvement schemes for the coming year. Over the past two years, we have seen the devastation that flooding causes in many

parts of our borough. It impacted on homes and businesses and disrupted local infrastructure.

2.2 Climate change will only increase the frequency and intensity of heavy rainfall, increasing our risk of flooding.

2.3 Since the flooding events of July 2021, the Council has significantly increased its investment in drainage, spending £800k in 2022/23 to ensure that all road gullies across Haringey were cleansed at least once each year, and to repair and provide additional road gullies where they were clearly needed.

2.4 However, the response to flooding in respect of defences, capacity management and education requires a holistic multi-agency approach. With the impacts of climate change becoming increasingly more evident, we more frequently see flooding at locations such as Turnpike Lane and the junction of Park Road, Muswell Hill and Priory Road due to an aged sewerage system, struggling to cope with anything other than moderate levels of rainfall. We will therefore continue to lobby Thames Water to maintain its assets, and the Government for funding to further green our borough - as well as exploiting every opportunity to bring in funding from external funding sources for flood risk reduction measures.

2.5 This year, the Council is investing a total of £1,562,500 of capital funding in the maintenance of our drainage assets, as well as implementing schemes to reduce the risk of flooding across the borough. We will continue to engage with residents, community groups, businesses, and other interested parties to co-design flood schemes that alter the existing infrastructure. This engagement will also extend to the management of any proposed significant disruption resulting from the construction works.

2.6 We will also help our communities build resilience and help them protect themselves from unmitigated flooding.

3 Recommendations

It is recommended that Cabinet:

3.1 Approves the Flood Water Management Investment Plan for the 2023/24 financial year as set out in the attached Appendix 1.

3.2 Delegates decisions relating to flood water management scheme design and implementation to the Head of Highways and Parking, subject to decisions being reported to Cabinet where a key decision is required.

3.3 Authorises the Head of Highways and Parking to carry out any required consultation in accordance with Appendix 2 and to make any necessary traffic orders, having had due regard to any prior consultation, to give effect to those schemes, subject to consultation representations regarding key decisions being considered by Cabinet.

3.4 Authorises the Head of Highways and Parking to consider any objections and representations and to report back to the Cabinet Member for Inequality and Resident Services if there are significant or substantial objections or concerns raised about a scheme not covering two or more wards.

4 Reasons for Decision

4.1 The FWMIP sets out the Council's flood water management and highways drainage resilience projects for the coming financial year and how they align with the Council's strategic objectives.

4.2 This report provides detail of the funding arrangements and seeks authority to proceed with the development and delivery of these projects.

5 Alternative options considered

5.1 The Council has a statutory duty to maintain the public highway network and reduce the risk of flooding in the borough. The 2023/24 Flood Water Management Investment Plan has been informed by data from actual flooding events, as well the Council's Transport and Local Flood Risk Management Strategies, our Surface Water Management Plan, and the developing Highways Asset Management Strategy.

5.2 The schemes proposed in this programme are those identified as high priority to reduce the risk of future flooding in the borough. Therefore, no alternative options are considered at this point.

6 Background Information

6.1 Surface water flooding is likely to become a more frequent event due to climate change, and the scale of flood events may increase in the future. Extreme rainfall can overload existing drainage systems, rivers and watercourses and result in surface water flooding.

6.2 Most of the borough is drained by surface water sewers (which receive surface runoff from roofs, roads, and other areas of hard standing) or combined water sewers (which receive surface water and foul water/effluent), all owned and managed by Thames Water. The main sewerage network was designed in the 1860's and has served London well. Over time, the area connected to the sewer network has increased, progressively reducing its capacity to accommodate heavy rainfall. This presents challenges and risk of flooding in many parts of London, including Haringey.

6.3 No single organisation can effectively manage flood risk independently and co-operation is needed across the Council, public agencies, government bodies, the private sector, and the community to manage flood risk and respond to flooding when it occurs.

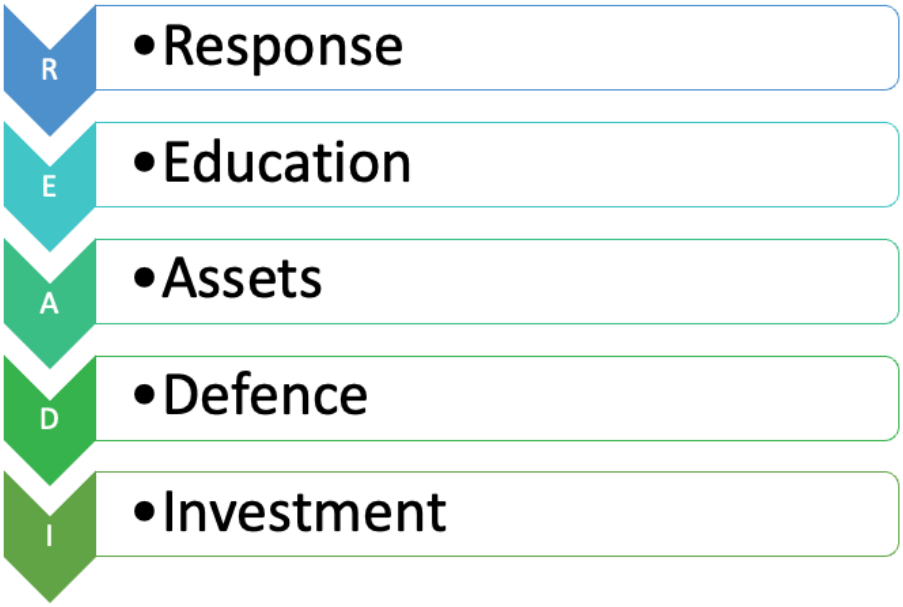
6.4 Our Local Flood Risk Management Strategy (adopted in 2019) sets out the Council's approach to managing flood risk. This strategy is due for review in 2024 and will seek to reflect changing climate patterns and new areas of potential flood risk. It will seek to further reduce floods risk through new

developments and consider a sustainable and holistic approach to flood management.

6.5 This strategy will also enable statutory organisations, interested stakeholders and the public to input into design development of certain individual major projects through the process of co-production. The level of engagement will be directed by the framework at Appendix 2 and future co-design guidance as it emerges.

6.6 The Council has reviewed its end-to-end response to flood management and has developed a system of working based on a combination of Response, Education, Assets, Defence and Investment or READI.

READI



6.7 'Response' represents how the Council, partners (including the emergency services) and residents all have an active role in responding to flooding. That includes a key focus on communication throughout any emergency situation and the coordinated response to minimise the impact of any flooding, as far as possible.

6.8 'Education' is about helping residents be more aware of what they can do to help reduce the impact of flooding, changing the mindset from city to coastal in respect of being prepared and knowing how to respond.

6.9 The Council's flood-related 'Assets' include a range of sustainable drainage systems, expanded on below and in Appendix 3, to help reduce the risk of flooding. It also includes the Council's gullies, which have recently benefitted from enhanced maintenance, cleansing and repair programmes to ensure they do their job. Works on highways culverts are also a vital element in our flood defence package.

6.10 The first line of 'Defence' is the assets mentioned above, but there are also additional defensive measures that residents, businesses and the Council can

take. These include the use of sandbags and other temporary flood boundaries, technology (including gully sucking vehicles designed to relieve pressure on London's Victorian sewer system, managed in Haringey by Thames Water) and the crucial network management activities undertaken by the Council's Highways Service to help divert traffic away from dangerous and flooded areas.

6.11 The Council has invested £2.48m in the borough's flood defences and assets over the last 2 years to help reduce the risk of flooding and minimise its impact when it does occur.

Sustainable Drainage Systems (SuDS)

6.12 The Council is making significant progress in implementing measures that reduce the risk of flooding. Sustainable drainage systems (SuDS) are designed to slow down surface water run-off and manage the associated flood and pollution risks, while enhancing or greening the local environment. Those measures range from permeable paving and rain gardens to swales and basins to hold storm water. Appendix 3 sets out the example on different types of SuDS, their definitions and how they integrate to reduce the surface water flooding within the borough. To date, 23 SuDS schemes have been implemented across the borough. This includes schemes in Crescent Gardens, Rectory Gardens, Adams Road, Priory Road, and Mayes Road, all completed in the last few years. Those schemes are delivering their objectives and have made a positive contribution to reducing flood risk, with the added benefits of improving the public realm.

6.13 Our parks and greenspaces provide the greatest opportunity for flood alleviation measures. They cover around 26% of the borough, providing scope to build resilience against future flooding risk.

6.14 Turnpike Lane has flooded several times during heavy rain in recent years. The main contributor is capacity issues with the sewer system and its inability to cope with flash flooding. This continues to impact upon many of the businesses operating in that road. As increased Thames Water sewer capacity is highly unlikely, the Turnpike Lane / Ducketts Common flood alleviation study planned for the coming year will explore concepts and ideas on how measures could be installed in the common to hold storm water, reducing the risk of flooding, while enhancing the public amenities on that green space.

6.15 The implementation of SuDS schemes on the public highway reduces surface water runoff and provides the wider benefits of additional greening and public realm improvements.

Drainage

6.16 The maintenance and management of Thames Water assets, as well as the Council's drainage network, is essential to reducing flood risk. The remedial works undertaken by Thames Water last year included the cleansing of sewers in Turnpike Lane and Muswell Hill to increase capacity, the repair of three collapsed sewers in Park Road, and the rectification of misconnections in Stanhope Road that resulted in sewerage discharge on the public highway. This

work, combined with repairs and improvements to the Council's drainage network, targeted flooding in specific areas.

6.17 Progress is being made in the maintenance of the Council's drainage assets. The Council cleaned approximately 16,000 gullies last year, of which around 7,000 are in critical drainage areas. Approximately 50% of those gullies were cleansed at least twice throughout the year. The enhanced cleansing regime, supported by the additional funding, has significantly reduced the number of blocked gullies. Several hundred gullies were repaired, i.e., replacement gully pots, covers, and frames and 12 new gullies were installed at various locations across the borough.

6.18 The Council, as the lead local flood authority, will continue to work with Thames Water to request that it maintains its assets to mitigate the likelihood of future floodings. The ongoing Council investment in gully cleansing and maintenance will ensure the resilience of highways drainage network.

6.19 In addition to the flood alleviation measures and asset maintenance, the Council has also enhanced the monitoring and horizon scanning of heavy rainfall forecast allowing advance preparation by Council response teams. Resident and business engagement and readiness is also essential with many tools and information sources available to help them protect their own homes and businesses in the event of flooding.

7. 2023 /24 programme

7.1 The 2022/23 investment programme involves a total funding allocation of £1,562,500. This will be supported by a revenue budget of £448,162 for gully cleansing. The details and locations of the schemes within the programme are set out in Appendix 1.

7.2 The programme can be summarised under 3 main categories.

- Strategic or local sustainable drainage schemes to help manage flood water (SuDS).
- Projects or annual contributions to support the operation of Haringey Council as the lead local flood authority, including work to support new funding opportunities.
- Maintenance of the Council drainage system, including repairs to gullies and their connections and installing new gullies to minimise ponding on the road network.

7.3 The £67,500 secured recently from the Environment Agency, as a part of the 'Risk of Flooding from Surface Water' (RoFSW) grant funding, will fund a borough-wide 'Surface Water Modelling and Mapping' exercise. This additional funding will help us fully understand the drainage of the western part of the borough, especially around the Hornsey and Crouch End area.

7.4 Building our community's resilience to flood risk is becoming increasingly important. While the projects and programmes in this report aim to reduce flood risk, they cannot eliminate it. It is important to improve our communities'

understanding of when flooding is likely to occur such as by being aware of Met Office weather alert systems, developing an understanding of the protective measures a building owner can take to reduce flood risk (for example, through property protection including sandbags) and ensuring that neighbours, particularly those who may be vulnerable to flood risk, are supported to protect themselves. There will be proactive messaging, liaising with communities - especially those who have already been impacted by floods.

7.5 The Council will also look for community volunteers to help manage the blocked autumn gullies, where falling leaves are the main offenders. Their negative impact is strengthened by the wind and rain which can blow leaves into gullies, turning them into mulch that prevents water from flowing away.

8. Design, Consultation and Engagement

8.1 The Council is committed to ensuring that local communities can influence and, where possible, shape the development of flood water management improvements in their neighbourhoods. The level of consultation/notification for the schemes are set out in the attached Appendix 2.

8.2 There is also opportunity for ongoing community involvement in maintaining those schemes once implemented and this will form part of the co-production process.

8.3 Major scheme proposals identified within this report will follow the emerging co-production framework being developed with the Council. The co-production process for these major schemes will be individual to each project and developed at the outset of the project, based on the issues to be addressed, level of stakeholder interest and budget available for each scheme. All scheme proposals will be developed in accordance with national, regional, local standards and best practise guidance.

8.4 Information will be made readily available on the Council's website on all major schemes, as well as through improved works signing and advance warning, with the aim to minimise disruption and inconvenience associated with construction works.

9. Contribution to strategic outcomes

9.1 Flooding can be devasting, disrupting lives, local infrastructure, and services. Proposals in this report set out the flood water management programme for the coming year. Those projects and programmes support a sustainable and holistic approach to flood management. This will deliver wider economic, environment, social benefits, climate change mitigation and wide-ranging improvements under the Water Framework Directive.

9.2 The FWMIP supports the 'Responding to the Climate Emergency' theme in the Corporate Delivery Plan, presented to Cabinet on 17th January 2023. Details are set out under *High Level Outcome 1: A Greener and Climate Resilient Haringey* for 'Improved flood defences and community resilience' through robust gully cleansing, enhanced flood defences and the delivery of the programme of schemes defined in the FWMIP.

Statutory Officers' comments

10 Finance

10.1.1 This report sets out the expenditure plan for the Highways and Parking Service in the forthcoming year, detailing all the Flood Water Management Investment Plan that includes the various funding streams that have been confirmed by the Environment Agency and Thames Water, as well as Council investment.

10.1.2 The list below provides a breakdown of the budgets for the Flood Water Management Investment Plan for 2023/24 of £1.065m, plus an additional grant from the Environment Agency of £0.0975m, Thames Water £0.100m, and a contribution of £0.300m from Greater London Authority as a part of its Green Resilience Funding. The above grant and contribution will be added to the capital programme.

Council FWMIP capital investment	£0.710m
Vired from Borough Roads	£0.355m
Environment Agency grants	£0.0975m
Thames Water	£0.100m
Greater London Authority	£0.300m
Total	**£1.5625m**

10.1.3 Additionally, £0.448 of revenue was allocated from 2022/23 onwards for gully cleansing.

10.2 Legal

10.2.1 The Council as a local highway authority has a statutory obligation under the Highways Act 1980 to maintain the public highways in the borough that it is responsible for, including the management of flood water, highway drainage systems and road gullies in vehicular highways.

10.2.2 The Council is also responsible for taking the lead in managing flood risk from surface water, groundwater and some of the culverted watercourses. In 2010, the Flood and Water Management Act came into effect, and this required the Council to take on the role of lead local flood authority (LLFA) for the Haringey area, as in Appendix 2.

10.2.3 This report seeks approval for the programme of flood intervention works set out in the Flood Water Management Investment Plan and how consultation where necessary will be undertaken, for the financial year 2023/24 which is a decision Cabinet can take in accordance with the Council's Constitution.

10.3 Procurement

10.3.1 There are no procurement issues arising from this report.

10.4 Equalities

10.4.1 The Council has a Public Sector Equality Duty under the Equality Act (2010) to have due regard to the need to:

- Eliminate discrimination, harassment and victimisation and any other conduct prohibited under the Act.
- Advance equality of opportunity between people who share those protected characteristics and people who do not.
- Foster good relations between people who share those characteristics and people who do not.

10.4.2 The three parts of the duty applies to the following protected characteristics: age, disability, gender reassignment, pregnancy/maternity, race, religion/faith, sex, and sexual orientation. Marriage and civil partnership status applies to the first part of the duty.

10.4.3 An Equalities Impact Assessment (EqIA) formed part of the statutory consultation process in 2018/19, which informed the development of the Local Implementation Plan 3 (LIP). The LIP sets out the objectives, delivery plans and monitoring arrangements for all transport scheme proposals, including those that contain flood water management works.

10.4.5 The key beneficial impacts relate to:

- Improved access to facilities due to managed flooding measures will benefit all Haringey residents and visitors, but some protected groups such as older people and children will benefit disproportionately.
- Safer roads and reduced levels of water pollution are likely to benefit people in some of the protected groups, such as older and/or disabled people with respiratory illnesses more than for the general population.

10.4.6 Groups who may have greater reliance on travel by car (e.g., people with disabilities; parents with childcare commitments; people in transport poverty) may be affected adversely in comparison to other groups who are better able to use public transport or travel actively. Schemes will be individually planned and delivered in such a way as to minimise any negative impacts that may arise due to construction works. Further, detailed equalities analyses will be carried out, including full Equalities Impact Assessments if appropriate, as and when individual schemes are coming forward for design, in order to mitigate any negative potential impacts (which may arise not only due to the construction works, but to the nature of the schemes themselves).

10.4.7 The communication and engagement measures set out in the Flood Water Management Investment Plan 2023/24 will increase awareness of works and minimise disruption caused at implementation stages. This will allow residents adequate time to make alternative travel arrangements, and any necessary adjustments will be made on a scheme-by-scheme basis to ensure continued access for affected groups with protected characteristics including disabled and elderly residents.

11. Use of Appendices

Appendix 1 - Flood Water Management Investment Plan proposals for 2023/24
Appendix 2 - Engagement for Flood Water Management Investment Plan for 2023/24

Appendix 3 - Examples of different types of SuDS with their definitions

15 Local Government (Access to Information) Act 1985

- Corporate Delivery Plan
- Transport Strategy 2018
- Walking and Cycling Action Plan
- Local Plan
- Local Flood Risk Management Strategy, Cabinet report 9/7/19
- Flood Water Management Investment Plan 2022/23, report March 2022
- Section 19 flood investigation reports