

Report for: Cabinet Member Signing – 7 March 2022

Title: Flood Water Management Investment Plan

Report authorised by: Stephen McDonnell, Director of Environment and Neighbourhoods

Lead Officer: Ann Cunningham, Head of Highways & Parking, 020 8489 1355, Ann.Cunningham@haringey.gov.uk, and Peter Boddy, Highways and Traffic Manager, 02084891765, Peter.Boddy@haringey.gov.uk

Ward(s) affected: All

Report for Key/Non-Key Decision: Key Decision

1 Describe the issue under consideration

- 1.1 It is widely recognised that the combined effects of climate change and continuing urban development will give rise to increased flood risk. In London alone, there are many properties that are deemed at risk of flooding. Haringey as well as several other London boroughs experienced flooding from extreme rainfall on two occasions in July 2021.
- 1.2 Haringey is responsible for taking the lead in managing flood risk from surface water, groundwater, reservoir, rivers, and some of the smaller 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.
- 1.3 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.
- 1.4 The Flood Water Management Investment Plan (FWMIP) sets out the capital investment programme for 2022/2023. Appendix 1 sets out the proposed allocation of schemes within the overall programme. This programme has been developed to meet the objectives in the Haringey Local Flood Risk Management Strategy.
- 1.5 The schemes proposed in the Flood Water Management Investment Plan are a 'living document' of proposals which are developed as the Council understands the various issues that have an impact on flooding.

2 Cabinet Member Introduction

- 2.1 I am pleased to introduce this report that sets out an increase in investment in flood prevention and drainage improvement schemes for Haringey.
- 2.2 The extreme rainfall events in July caused damage to properties in Haringey and across London. It served as a reminder – if it were needed – that London’s Victorian sewer system was not designed, or built, to deal with the volume of water that it has been asked to cope with and that extreme weather events – a consequence of the climate emergency – are becoming increasingly common.
- 2.3 In response to these events, we accelerated our gully maintenance programme. We also carried out a flood investigation and are publishing the findings in three reports, in line with Section 19 of the Flood and Water Management Act. These Section 19 reports are for Wood Green, South Tottenham and Hornsey Crouch End. We will also be reviewing and updating our Local Flood Risk Management Strategy this year.
- 2.4 As set out in Appendix 1, this report identifies capital investment of £1,035,000 into a range of flood prevention and drainage schemes.
- 2.5 It is also important to note that the additional funding of £355,000 (capital) and £326,000 (revenue) will allow us to maintain the highway gullies to an improved standard on an ongoing basis, reducing the risk of future localised flooding.
- 2.6 Finally, we will continue with our programme of highways gully cleansing which saw an additional injection of £431,762 in October 2021. This programme is due to complete by summer 2022.
- 2.7 The Council will continue to engage with residents, community groups, businesses and other interested parties when co-designing flood schemes, where proposals will alter the existing infrastructure. This engagement will also extend to the management of any likely disruption from any associated proposed construction works.

3 Recommendations

The Cabinet Member is asked:

- 3.1 To approve the Flood Water Management Investment Plan for the 2022/23 financial year as set out in the attached Appendix 1.
- 3.2 To delegate decisions relating to flood water management scheme design and implementation to the Head of Highways and Parking.
- 3.3 To authorise 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.
- 3.4 To authorise the Head of Highways and Parking to consider any objections and representations and to report back to the Cabinet Member for Customer Service,

Welfare and the Public Realm if there are significant or substantial objections or concerns raised; and

- 3.5 To agree to a review of policy to allow a more robust approach in dissuading the conversion of existing property frontages from soft landscaping to hard landscaping in the face of the global climate crisis.
- 3.6 To agree to vire £355k from the Borough Roads budget to the Flood Water Management budget

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 The report provides detail of the funding arrangements, seeks authority to proceed with the development and delivery of these projects. Some of those projects will be subject to appropriate consultation.

5 Alternative options considered.

- 5.1 No other options were considered. The Council has a statutory obligation to maintain the public highway network. The Council is the lead local flood authority in the borough and is responsible for taking the lead in managing flood risk from surface water, groundwater, reservoir, rivers and some of the smaller watercourses. This 2022/23 investment plan has been informed by the Council's Transport Strategy, Local Flood Risk Management Strategy and a developing Asset Management Strategy. The projects proposed are those that have already been identified as priorities to further reduce the risk of future flooding in the borough.
- 5.2 The funding for the proposed projects comes from Council resources approved by Cabinet as part of the Capital Programme and from external grants or contributions that have been received or are proposed.

6 Background Information

- 6.1 Flooding is likely to become a more frequent event due to climate change, and the scale of flood events may also increase in the future. The cause of the increase in flood events would be wetter weather throughout the year contributing to surface water flooding overloading the existing drainage systems, as well as river flooding through increased catchment runoff, leading to the risk of many more properties and people being deemed at risk of flooding.
- 6.2 The Flood and Water Management Act 2010 assigned responsibilities as a lead local flood authority (LLFA) on local authorities including Haringey. This requires the borough to work with strategic partners such as the Environment Agency, water companies and others to manage various aspects of flood risk. In line with

its responsibilities as a LLFA, a Local Flood Risk Management Strategy was produced and subsequently adopted by Haringey in July 2019. It is due to be reviewed in 2022 for any changes following the recent rainfall events in July 2021. The proposed scheme list for 2022/23 incorporates these changes, where applicable.

- 6.3 In July 2021, Haringey experienced two main flood events throughout the borough which directly resulted in gully cleansing and investigations in areas where these floods occurred. As the Council is an LLFA, Section 19 (Flood Water Management Act) flood investigations were progressed for 3 areas in the borough and the resultant investigatory reports - Appendices 3, 4 and 5 to this report - are now ready to be published.
- 6.4 These Section 19 reports make numerous recommendations. Section 19 flood investigations are not in-depth analyses of the flood risks or mechanisms. The flood investigations do not give the Council the powers to require any of the parties to undertake the works recommended in the report. However, as the Section 19 reports include recommendations for the Council to act upon, some funding for works is assigned in the 2022/23 programme. In summary, the recommendations include the below:
- Priority to cleaning gully pots in known surface water flood risk areas.
 - Haringey Council to consider closures of roads where there are localised high-risk flood warnings.
 - Haringey to consider retrofitting SuDS projects where applicable and viable.
 - Thames Water to review their surface water cleaning regimes in high-risk areas.
 - Thames Water to review their response to floods and this review to be completed by Spring 2022.
 - Thames Water to consider a review of high-risk areas to identify locations where surface water sewers can be upgraded to better withstand larger storm events.
 - Properties in high-risk flood areas should be made aware of their risk and be encouraged to investigate resilience and resistant measures.
- 6.5 In response to the flooding events in July 2021 and prior to the Section 19 report findings, Haringey Council reviewed its investment in gully cleansing and maintenance. An additional capital and revenue allocation was made available in 2021/22 totalling £431,762 (comprising £175k capital and £257k revenue). Resulting from this additional investment, the Council commenced, in October 2021, a major programme of cyclical highways gully cleansing that is programmed to be complete by the summer of 2022 - this supplements the annual gully cleansing regime (primarily focused on the borough's 'Critical Drainage Areas') that was already in operation.
- 6.6 The Local Flood Risk Management Strategy not only aims to clarify the roles of the key partners and improve collaborative working through the sharing of information, but also to identify flood management solutions that can be developed to provide multiple benefits to the natural and social environment. The FWMIP 2022/23 identifies projects and programmes of work to achieve this

objective, as well as supporting the ongoing process of identifying and developing future opportunities.

- 6.7 There are several external funding opportunities to support the delivery of the Council's flood water management projects. This includes funding through the Environment Agency for flood water management schemes and the GLA's Greener City Fund for local SuDS projects. Grant funding of £200k has been awarded to support the FWMIP for 2022/23.
- 6.8 The Council agreed an investment of £2,395,000 into flood water management between 2021/22 and 2023/24. Of this funding, £1,035,000 is agreed for 2022/23, allowing a total budget (including external grant funding of £1,235,00) within the FWMIP. The breakdown of this funding is set out in paragraph 8.2 of this report. It is also expected that there will be additional investments associated with regeneration and other development and transport projects.
- 6.9 The increased commitment to gully cleansing and maintenance will continue into 2022/23. A capital budget allocation of £355,000 will be used to replace highways gullies and/or their drainage connections. This budget will be complemented by an increase in revenue funding for highway gully cleaning of £326,000. This increased level of investment will allow the gully assets to be maintained to a higher standard across the whole of the borough, helping to reduce the future risks of localised flooding.
- 6.10 The details and locations of the schemes within the 2022/23 programme are set out in Appendix 1. These projects fall generally into 4 categories:
- Strategic or local suburban 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.
 - Measures resulting from recommendations in the Section 19 reports.
 - Maintenance of recently installed SuDS Schemes.

Review of policies - paving over front gardens

- 6.11 The loss of front gardens and other inappropriate water discharges onto the public highway is problematic in highly urbanised areas such as London, as it may lead to increased flood risk and exacerbate local climatic conditions
- 6.12 The final recommendation referred to in the Section 19 reports findings summary in paragraph 6.4 above is 'Properties in high-risk flood areas should be made aware of their risk and be encouraged to investigate resilience and resistant measures'. Haringey Council, in turn, offers advice through its website and information on how to sign up for flood warnings.
- 6.13 It is recognised that the conversion of front gardens (which allow rainfall to soak straight into the soft ground) to hard standing is, for the most part, to allow the

parking of vehicles off-road - provided there is sufficient distance (4.8 metres) from the back of highway to the front of the property to accommodate a vehicle, end-on. It should be noted that any proposals for crossovers on the Transport for London Road Network will require approval by TfL.

6.14 A 'Development Management Policy' (DM34) was created in 2017 to help safeguard against any unintended increase in flooding risk. DM34 states the following:

- a) Where planning permission is required, the Council will only permit parking on front gardens where a minimum of 50% of existing soft landscaping area is being retained. All proposals must appropriately manage flood risk in line with other plan policies. Any hard standing should incorporate the use of a permeable material
- b) All proposals will be considered having regard to their impact on the historic environment, in line with Policy DM9.
- c) Cumulative loss of front garden space can result in increased flood risk caused by surface water run off because of the greater expanse of impermeable surfaces. The loss of vegetation can also contribute to increased air pollution in urban areas. The loss of front gardens can also impact the character and appearance of neighbourhood resulting in harm to established streetscapes and the uniform appearances of groups of houses. Where the Council can manage the loss of gardens, not including development which is permitted, it will seek the retention of 50% of the garden as soft landscaping and any hardstanding should be constructed from a permeable material.

6.15 In circumstances where planning permission is not required, the Council provides the following advice on the webpage related to vehicle crossovers under the heading 'sustainable driveways':

"Increased rainfall can leave street drains struggling to cope. When this happens, the water can go back into the front drive and flood homes.

For this reason:

- remove as little of your soft garden as possible
- use permeable paving
- keep hard surfaces to a minimum"

Links are then provided to the Royal Horticultural Society website for further advice on designing front gardens and the introduction of permeable paving.

6.16 The current policy and advice therefore needs strengthening to make property owners far more aware of the adverse environmental impact of any decision to convert their existing frontages to hardstanding. It is extremely unlikely that those who have previously undertaken such conversion will have recognised the cumulative effect that this has – in particular, increasing the likelihood of localised flooding. The need for a more robust approach is in line with an element of the Council's Climate Change Action Plan Objective Com1 – to increase education and awareness raising across the borough to residents and businesses.

- 6.17 The Council will therefore amend its policy to ensure a more robust approach, as well as strengthening its practices, communications and the education of residents on the consequences of driveway parking.

Design, Consultation and Engagement

- 6.18 The Council is committed to ensuring that local communities are informed of and engaged in the development of flood water management improvements in their neighbourhoods. A co-production approach broadens the scope of external funding that may be secured for local betterment and helps ensure that local communities have a role in ensuring delivered schemes have more robust sustainability.
- 6.19 The proposals identified within this report will initially be developed or directed by officers but then broadened out to ensure co-production with residents, Friends Groups and appropriate agencies and organisations. All proposals will be developed in accordance with national, regional, local standards and best practise.
- 6.20 The level of consultation/notification for schemes is set out in the attached Appendix 2.
- 6.21 The Council will continue to improve the quality of information available to residents and other interested parties on flood water management projects planned for their areas. This will involve information being made readily available on the Council's website, as well as through improved works signing and advance warning to minimise disruption and inconvenience associated with works.

7.0 Contribution to strategic outcomes

- 7.1 The Flood Water Management Investment Plan supports two Themes, outlined in paragraphs 7.2 and 7.3, within the Borough Plan 2019-2023.
- 7.2 People Theme: A Haringey where strong families, sturdy networks and resilient communities nurture all residents to live well and achieve their potential. The projects in the Flood Water Management Investment Plan will contribute to specific outcomes within this Theme, by improving road safety through reduced flooding incidents.
- 7.3 Place Theme: A place with robust, resilient & connected communities where people can lead active and healthy lives in an environment that is safe, clean and green. The projects in the Flood Water Management Investment Plan will contribute to specific outcomes within this Theme, by improving the public realm, the road network condition and properties which are affected by flooding.
- 7.4 Economy Theme: growing economy which provides opportunities for all our residents and supports our businesses to thrive. Businesses were negatively impacted by flooding in July 2021. The projects in the Flood Water Management Investment Plan, including the maintenance of the highways drainage system

will also support the business community by alleviating flooding that can negatively impact on them.

- 7.5 London-wide contribution to a healthier London - The Mayor of London's Transport Strategy.
- 7.6 Haringey's Climate Change Action Plan – which sets out how and why the borough will become net zero carbon by 2041.

Statutory Officers' comments (Director of Finance (procurement), Head of Legal and Governance, Equalities)

8.0 Finance

- 8.1 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 and the Council's investment.
- 8.2 The list below provides a breakdown of the budgets for the flood water management investment for 2022/23 as agreed at the Council's budget setting meeting of £1.035m, plus an additional grant from the Environment Agency of £0.06m, a contribution from Thames 21 via Coca Cola funding of £0.07m and a contribution from Thames Water of £0.07m. The grant and contribution will be added to the capital programme.

Council FWMIP capital investment	£0.680m
Assets - capital growth bid gully maintenance	£0.355m
Environment Agency grants	£0.060m
Thames Water	£0.070m
Thames 21	£0.070m
Total	£1.235m

Additionally, £0.326m of revenue has been allocated from 2022/23 onwards

9.0 Legal

- 9.1 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. This report sets out the Flood Water Management Investment Plan and any necessary consultation for the financial year 2022/23.
- 9.2 The Council is also responsible for taking the lead in managing flood risk from surface water, groundwater, reservoir, rivers, and some of the smaller 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. The proposals in this report will support the delivery of the Council's Flood Water Management Investment Plan.

- 9.3 The Head of Legal & Governance confirms there are no legal reasons preventing the Cabinet from approving the recommendations in the report.

10.0 Procurement

- 10.1 There are no procurement issues arising from this report.

11. Equality

- 11.1 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.

- 11.2 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.

- 11.3 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.

- 11.4 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.

- 11.5 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.

11.6 Flood water management schemes can increase cycling and walking through improved drainage to the highway network.

11.7 The communication and engagement measures set out in the Flood Water Management Investment Plan 2022/23 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.

12 Use of Appendices

Appendix 1: Flood Water Management Investment Plan proposals for 2022/23

Appendix 2: Consultation for Flood Water Management Works Plan in 2022/23

Appendix 3: Section 19 Flood Investigation Report - Wood Green

Appendix 4: Section 19 Flood Investigation Report - South Tottenham

Appendix 5: Section 19 Flood Investigation Report - Hornsey and Crouch End

13 Local Government (Access to Information) Act 1985

- [Borough Plan 2019-2023](#)
- [Transport Strategy 2018](#)
- [Draft Walking and Cycling Action Plan](#)
- [Cabinet report 7/12/21: 2022-23 Budget and 2022-2027 Medium Term Financial Strategy Report](#)
- [Local Plan](#)
- [Local Flood Risk Management Strategy, Cabinet report 9/7/19](#)
- [Flood Water Management Investment Plan 2021/22, Cabinet report 9/3/21](#)

Appendix 1

Project Name	Ward	Project Brief / Overview	Grant	Source	Council Budget 2022/23
Queen's Wood Natural Flood Management Project	Muswell Hill	Completion of scheme to mitigate surface water flood risk to the properties at Wood Vale and the surrounding areas as well as protecting the ecology and biodiversity of an ancient woodland. Works proposed to be on site in Spring 2022.	£70,000	Thames Water 2022-23, plus any EA carry over funding from 21/22	0
Chestnuts Park Rainscape Masterplan	St Ann's	To investigate the possibility of opening the Stonebridge Brook culvert and reduce flooding of downstream properties. Further surveys include topographical, ecological and connectivity. Detailed design to commence in 2022/23.	£30,000 £70,000	EA Local Levy £30k remaining from 2021/22. Thames 21 via Coca Cola for wetlands.	£95,000
Larkspur Close (IUD) - Phase II	White Hart Lane	Detailed design completion and commencement of the construction of SuDS works at Fryatt Road and Jellicoe Road to reduce the flooding incidents in Larkspur Close.	£0		£180,000

Project Name	Ward	Project Brief / Overview	Grant	Source	Council Budget 2022/23
Muswell Hill Flood Mitigation Scheme	Fortis Green	Co- design of final details for SuDS improvements (rain gardens, permeable paving) within the area of the junction of Muswell Hill, Priory Road, Park Road, Etheldene Avenue and Farrer Mews to address the existing surface water drainage issues.	0		£199,000
Priory Park Flood Alleviation Scheme Phase 1		Completion of design and commencement of drainage works outside and within the Park.	£30,000	EA Local Levy (EA) remaining £30k from 2021/22. EA Bid to be made for later work phases	£110,000
Adams Road Minor SuDS Scheme	West Green	Maintenance of recently constructed SuDS scheme.	£0		£1,000
Works as recommended in Section 19 Investigation Reports	Borough-wide	Retrofit SuDS, Additional Gullies cleaning and installations, Work with TfL to prevent flooding at Underground Stations.	£0		£80,000
London Lee Catchment Partnership - Thames 21	Borough-wide	Annual contribution to Thames 21. Use its contact network including corporates, government, academic, charitable trusts, and any other contacts to develop and apply on behalf for funds along with engagement of local communities.	£0		£5,000

Project Name	Ward	Project Brief / Overview	Grant	Source	Council Budget 2022/23
Section 19 Investigation Reports	Borough -wide	Any further S19 of Flood & Water Management Act to investigate flooding.	£0		£5,000
External Funding Bids	Borough -wide	Drafting proposals for a government fund for innovative projects	£0		£5,000
Gully maintenance programme	Borough -wide	Borough wide highways gully works, for repairs, new connections and gullies, programme	£0		£355,000
Grants	Site Specific	EA, Thames 21, Thames Water	£200,000		1,035,000
Total Capital	£1,235,000				
Revenue Gully Cleansing programme	Borough -wide	Borough wide highways gully cleansing programme	£0		£326,000
			£0		326,000
Total Revenue	£326,000				

Appendix 2

Consultation for Flood Water Management Investment Plan

The various flood water management schemes developed through the FWMIP will be the subject of consultation/ notification. The level of consultation will depend upon the size and impact of the scheme on the local community and whether it is a statutory requirement. The three consultation/notification types are:

- Notification of works (schemes that have a minor impact on the highway network and public realm) – residents and businesses of affected properties will be notified by letter drop before commencement of detailed design works. In addition, they will be notified by letter drop and any other appropriate media up to 3 weeks in advance of work commencing.
- Statutory notification e.g. traffic regulation orders - the public will be notified of the Council's intention regarding proposals through advertisements placed in the local press and on site. Residents and businesses locally affected by the proposals will also be notified by letter drop. The notification will provide details of the scheme and a commencement date for the proposed construction works. Resident, traders and stakeholders will have the opportunity to approve/object to these proposals and these will be considered before implementation of the schemes.
- Public consultation – any larger high-profile schemes will be subject to a consultation with the locally affected properties and lead user groups (where applicable e.g. for parks). The consultation will include public and Microsoft Teams meetings, exhibition of proposals on the web and on local notice boards, the liaison with local groups. Below sets out the consultation process for each scheme.

Consultation on Flood Water Management Investment Plan 2022/23

Scheme name / type	Consultation Type		
	Notification	Statutory Notification	Full Consultation
Queen's Wood NFM Scheme	✓		
Chestnuts Park Rainscape Masterplan	✓		✓
Larkspur Close (IUD) - Phase II	✓		✓ (where applicable)
Muswell Hill Flood Mitigation Scheme	✓	✓	✓ (where applicable)
Priory Park Phase 1 Flood Mitigation Scheme	✓	✓	✓
Section 19 Works	✓	✓	✓ (where applicable)