



HILLINGDON
LONDON

Local Flood Risk Management Strategy

FOREWORD

Our climate is changing, and we are already experiencing more and more critical rainfall events. With these events comes an increased probability of flooding. Floods bring huge levels of immediate disruption and pose severe risk to people and property. A flood is not just a short term problem though, for those who have experienced flooding the harmful consequences remain long after water levels return to normal.

The London Borough of Hillingdon has already declared a climate emergency with bold ambitions to reduce its own carbon emissions by 2030. However, many impacts of climate change are now inescapable with more extreme weather events becoming increasingly the norm.

As the Lead Local Flood Authority, the Council is committed to being at the forefront of the action to protect our residents and businesses. This Local Flood Risk Management Strategy is a requirement of the Flood and Water Management Act 2010 and sets out our approach to managing flood risk. We have already taken measures to reduce flood risk across the borough and these are set out in the Strategy, but we also commit to further actions and objectives to respond more aggressively to the increasing risk of flooding.

The Strategy also provides opportunities though. Creative approaches to flood risk management can bring additional benefits in managing drought as well as enhancing opportunities for nature. We intend to pursue the kinds of flood risk management projects that provide more than just flood risk management.

The Strategy shows our intentions; but we can't work alone. We need to work with our residents and communities alongside key partners such as the Environment Agency and Thames Water to realise the objectives of the Strategy. Consequently, it is important for this Strategy to reflect the aspirations of those we need to work with.

We are therefore keen for the consultation on this Strategy to reach all parts of the borough, to generate interest and to give the opportunity for our communities to help shape our approach to flood risk management.

Councillor Lavery
Cabinet Member for Residents' Services

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ACRONYMS AND ABBREVIATIONS

Abbreviation	Definition
BNG	Biodiversity Net Gain
CDA	Critical Drainage Area
DEFRA	Department for Environment, Food and Rural Affairs
EA	Environment Agency
FAS	Flood Alleviation Scheme
FCERM	Flood and Coastal Erosion Risk Management
FRMP	Flood Risk Management Plan
FWMA	Flood and Water Management Act 2010
GI	Green infrastructure
GiA	Grant in Aid
Hillingdon	The geographical area of the London Borough of Hillingdon
Hillingdon Council	The Local Authority governing the London Borough of Hillingdon
HRA	Habitats Regulations Assessment
LFRMS	Local Flood Risk Management Strategy
LLFA	Lead Local Flood Authority
LPA	Local Planning Authority
MAFP	Multi-Agency Flood Plan
NFM	Natural Flood Management
PFR	Property Flood Resilience
RFCC	Regional Flood and Coastal Committee
RMA	Risk Management Authority
RoFSW	Risk of Flooding from Surface Water
SEA	Strategic Environmental Assessment
SFRA	Strategic Flood Risk Assessment
SuDS	Sustainable Drainage Systems
SWMP	Surface Water Management Plan
TfL	Transport for London
Thames Water	Thames Water Utilities Limited
UGF	Urban Greening Factor

1 A LOCAL FLOOD RISK MANAGEMENT STRATEGY

1.1 Local Flood Risk Management Strategy

A Local Flood Risk Management Strategy (LFRMS, 'the Strategy') is a requirement of the Flood and Water Management Act 2010 ('the Act'). It needs to set out information on 'local flood risks' relating to surface water runoff, groundwater and ordinary watercourses. It then requires the responsible authority to set out how it will set about reducing the flood risk associated with these sources of flooding.

The Council's Strategy goes beyond just these local risks and sets out a collaborative approach with other responsible authorities to ensure that the approach to flood and water management within Hillingdon is captured in one place.

Why do we need an LFRMS?

The Act established the roles and responsibilities for different flood risk management authorities which includes the Council as the Lead Local Flood Authority for the borough.

This is an important leadership role in organising and progressing proactive management of flood risk. In order to achieve this, Section 9 of the Act establishes the requirement to produce a LFRMS. The Strategy needs to be kept up to date to reflect changes to legislation and to ensure consistencies with other national and regional plans. The table below sets out what needs to be included within the Strategy.

1	the risk management authorities in the authority's area
2	the flood and coastal erosion risk management functions that may be exercised by those authorities in relation to the area
3	the objectives for managing local flood risk (including any objectives included in the authority's flood risk management plan prepared in accordance with the Flood Risk Regulations 2009)
4	the measures proposed to achieve those objectives
5	how and when the measures are expected to be implemented
6	the costs and benefits of those measures, and how they are to be paid for
7	the assessment of local flood risk for the purpose of the strategy
8	how and when the strategy is to be reviewed
9	how the strategy contributes to the achievement of wider environmental objectives

Additional assessments

The LFRMS is a local strategy which means it must also be assessed through both a Strategic Environmental Assessment (SEA) and Habitats Regulations Assessment (HRA).

The LFRMS has been screened in accordance with the SEA requirements to determine if it will have a likely significant environmental effect. Completion of an SEA is a requirement of plans and strategies under the [Environmental Assessment of Plans and Programmes Regulations \(2004\)](#) (which implements the [European SEA Directive \(2001\)](#)). The SEA screening report can be found in Appendix A.

An HRA determines if delivery of the LFRMS will have any negative effects on protected European habitat sites. Undertaking an HRA is a requirement for plans and strategies under the [Conservation of Habitats and Species Regulations \(2017\)](#). The HRA screening report can be found in Appendix C.

Presentation of the Strategy

This Strategy will be a 'living document'. Although presented as a single document within this consultation, the component sections will form individual parts that will be hosted on the Council's webpages. This allows for the various sections to be kept more readily up to date without a full and resource intensive review of the whole Strategy. It also allows the Council to add or amend the Strategy over time so that it is entirely consistent with parent legislation and policies as well as being able to reflect aspirations of our communities. The online presentation will be set around the following themes which reflect the objectives in the LFRMS.



It is considered that this approach will enable the Council to be more responsive to the changing nature of flood risk, result in a more collaborative approach to flood management and will therefore better serve our communities.

1.2 Strategic objectives

The Strategy is required to be set around a series of objectives. The proposed objectives are outlined below linked to the themes set out in the previous section.

Theme	Objective
The Local Flood Risk Management Strategy	Understanding the Local Flood Risk Management Strategy
Sources of Flooding	Improve knowledge of flood risks in the London Borough of Hillingdon
Working with Others	Improve the collaboration of Risk Management Authorities, and understanding of roles and responsibilities, to manage flood risk effectively
Opportunities and Projects	Identify and implement opportunities for flood risk management
New Development and Planning	Ensure that development within the London Borough of Hillingdon accounts for and mitigates flood risk
Local Communities and Flooding	Engage with communities to develop the awareness of flood risk in local areas and improve their resilience

1.3 Action Plan

The objectives set out the strategic intentions of the Council, but they require more specific actions to facilitate delivery. Consequently, an Action Plan has been prepared which sets out how the Council will turn strategic aspirations into outcomes that better manage flood risk. The Action Plan will be reviewed on an annual basis to ensure it is kept up to date and reflective of a changing climate.

The actions for each objective are included at the end of the relevant chapter; the full Action Plan can be found in Appendix A.

1.4 Climate Change

As a result of climate change, the UK can expect to see more extreme weather events which are likely to include more frequent and intense rainfall events. These events will increase the risks of flooding making it increasingly important that Hillingdon adapts to, and mitigates, future flood risk. Conversely, it is likely there will be longer periods of drought

and extreme heat where the lack of water can have severe implications, particularly for the natural environment.

The Council adopted its [Strategic Climate Action Plan](#) in 2021 which sets out how Hillingdon will respond to the issue of climate change at a local level. This sets out how the Council is seeking to adapt to the changing climate. The Strategy sits alongside the Strategic Climate Action Plan in delivering measures which will protect Hillingdon from current flood risk but also against future risk. The delivery of the Strategy plays an important role in adapting and mitigating this risk and seeks to deliver flood risk management in alignment with Hillingdon's climate change targets. The Strategy achieves this by incorporating consideration of climate change and the environmental benefits to be found in flood risk management into the actions.

There is also a requirement to produce a Climate Adaptation and Mitigation Action Plan which will overlap significantly with the Strategy. This will be developed in due course once the Strategy has been adopted.

1.5 Monitoring

The Strategy will be kept under review to ensure it reflects any major changes to relevant legislation. By breaking the Strategy into component parts, the Council is able to amend or add to the various sections without recourse to a holistic review. This places the Council in a better position to be more responsive to changing circumstances and allows communities and residents the opportunity to take a more proactive role in shaping how the Council responds to flood risk.

Delivery of the Strategy will be evaluated by the LLFA through monitoring delivery of the actions in the Action Plan. Each action will be reviewed against internal targets for the timing of delivery and stage of progress. This will enable the LLFA to track and report on progress of delivery of the LFRMS. In this context, the LLFA performs the statutory function of ensuring the Council's approach to flood risk management is aligned with the adopted Strategy.

It should also be noted that the Action Plan will be reviewed once full details of the SuDS Approving Body (SAB) have been released. The Council will become a SAB following activation of the relevant section of the Act. This is a new role that has not yet been defined but will require new development to have drainage proposals subject to a separate application process to be overseen by the SAB. Further information on the SAB can be found in Section 5.2.1.

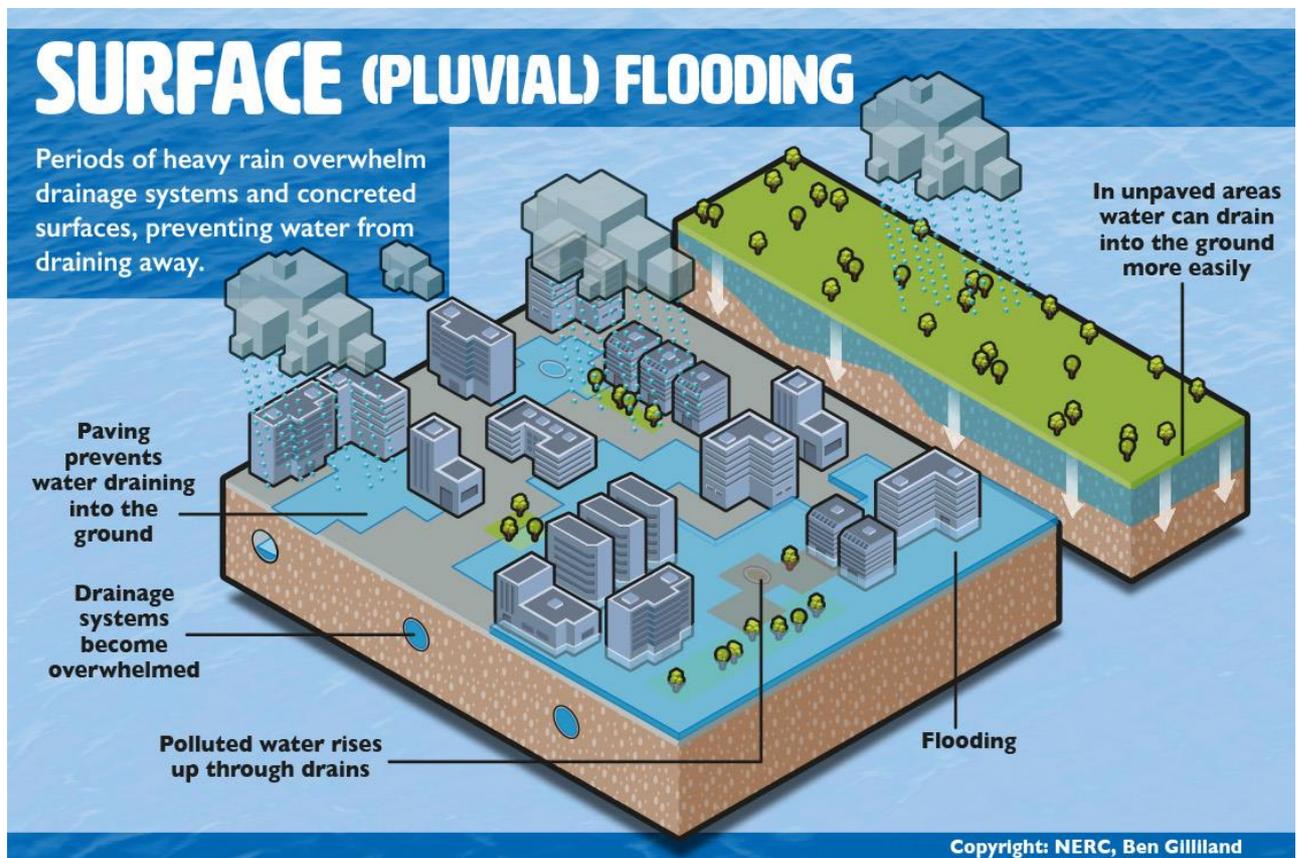
2 SOURCES OF FLOODING

2.1 Flood risks in Hillingdon

Flooding is generally a result of rainfall although other causes do exist such as groundwater flooding that can occur from natural springs reaching the surface. However, whilst the route cause of flooding may be obvious how it reaches people and property is far more complicated. The pathway from rainfall to flooding are collectively known as the 'sources of flooding'; to complicate matters further, different bodies are responsible for different sources of flooding.

2.1.1 Surface water

Flooding from surface water, also known as pluvial flooding, occurs when the volume of rainwater exceeds the capacity of drainage systems and is unable to drain quickly enough into the ground through infiltration. This type of flooding typically occurs during periods of intense rainfall and is a particular issue in urban areas due to the high coverage of impermeable surfaces. Short but intense periods of rainfall can often overwhelm existing but dated drainage infrastructure causing a significant degree of disruption. These events, sometimes known as flash flooding, are harder to predict and come with less locally specific warnings.



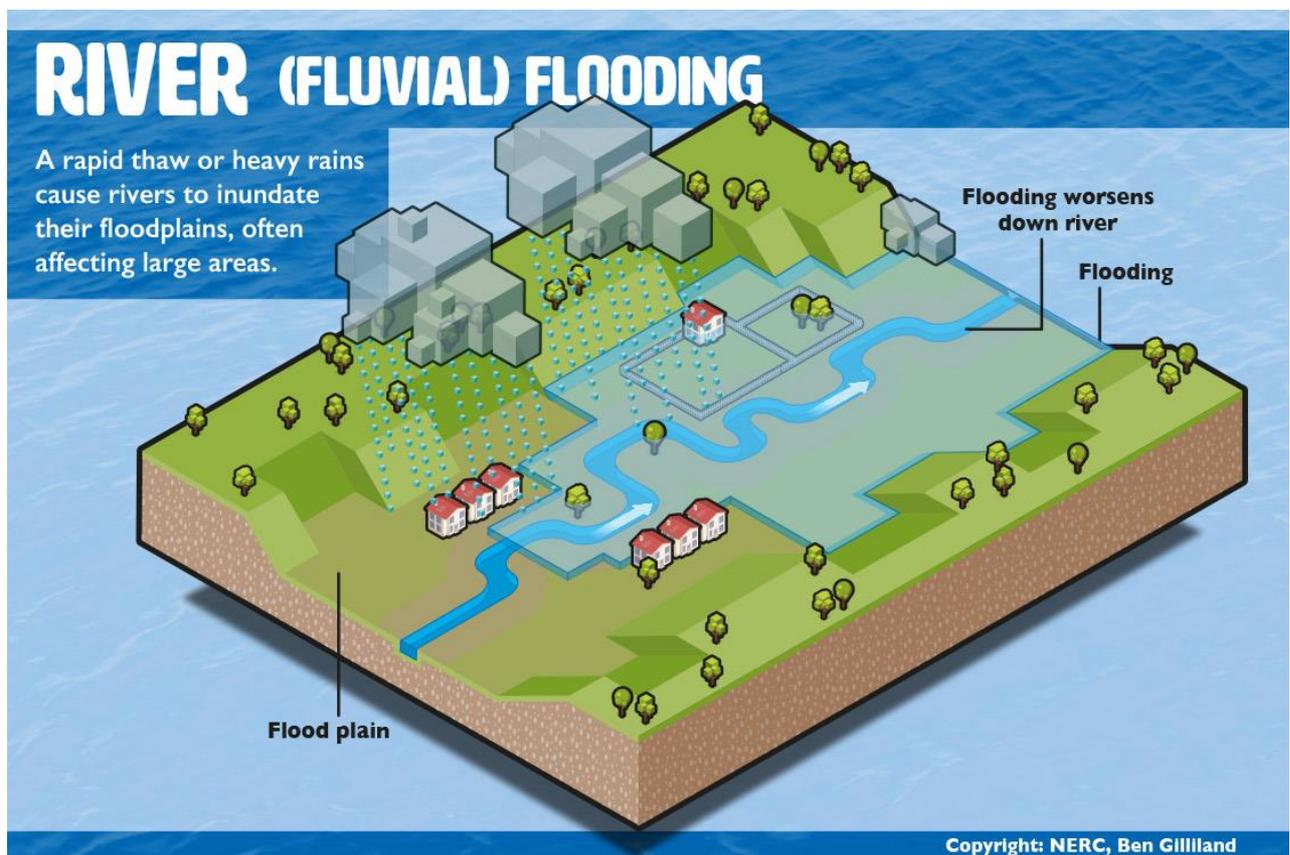
Source: floodhub.co.uk

2.1.2 Rivers

Flooding from rivers, also known as fluvial flooding, happens when the volume of flow in a river exceeds its capacity and the excess water spills out, or breaches the containment area. In Hillingdon the principle rivers are the River Colne, the River Crane and the River Pinn. There are a number of other watercourses that are classed as main rivers throughout the borough. Main rivers are managed by the Environment Agency. A map of main rivers can be seen [here](#).

Watercourses other than these are categorised as ordinary watercourses and are within the remit of the LLFA although their management, i.e. unrestricted flow is dependent on whoever the landowner is.

River flooding is generally more predictable. Environment Agency telemetry has been strategically placed on the river network to allow automatic monitoring of levels. When levels reach a certain height, warnings are triggered which would then prompt individual flood action plans to be implemented. Current levels can be checked here: [river and sea levels](#).



Source: floodhub.co.uk

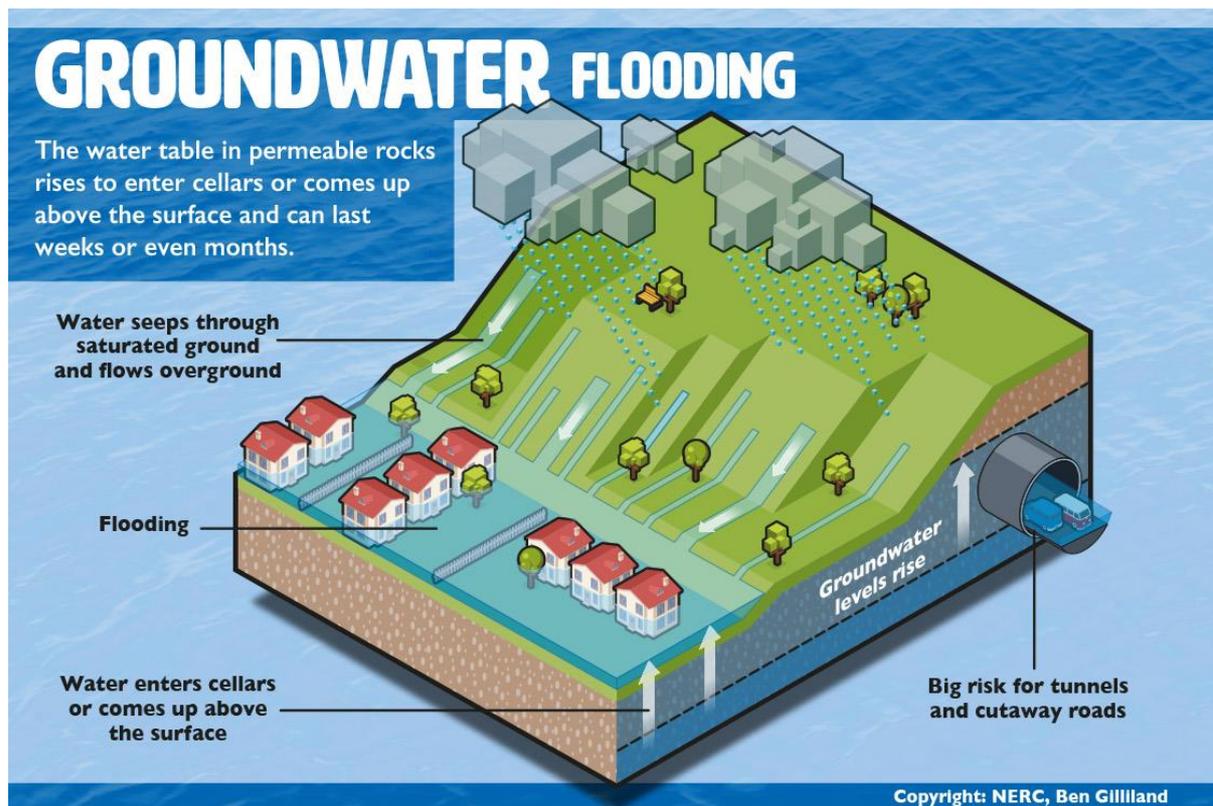
Areas alongside rivers is classified as floodplain. The level of risk changes depending on the distance from the river, or the contours of the land. The Environment Agency categorises areas as being in Flood Zone 1, Flood Zone 2, or Flood Zone 3. The definitions are outlined in **Error! Reference source not found.** Flood Zone 3 is then divided into Flood Zone 3a and Flood Zone 3b by the Local Planning Authority, in discussion with the Environment Agency

and the LLFA. The [West London SFRA](#) outlines the methodology used to do this for the boroughs that it covers, including Hillingdon¹.

Flood Zone	Criteria
1	Land with less than 0.1% chance of flooding each year.
2	Land with between 0.1% and 1% chance of flooding each year.
3a	Land with greater than 1% chance of flooding each year.
3b	Functional Floodplain. This is outlined in the West London SFRA as land with a 5% or greater chance of flooding each year and where water has to flow or be stored in a time of flood.

2.1.3 Groundwater

Flooding from groundwater happens when the water table, beneath the ground, rises to the surface of the ground. Groundwater levels are generally highest in early spring and lowest in early autumn. Groundwater flooding is not necessarily directly linked to a specific rainfall event and flood events are usually longer lasting than other causes as they are dependent on the water table reducing which is affected by the permeability of the ground.



¹ The Planning Practice Guidance (PPG) was updated in 2022 which changed Flood Zone 3b from land with greater than 5% chance of flooding to land with greater than 3.3% chance of flooding. For planning applications in Hillingdon the definition of Flood Zone 3b in the West London SFRA will apply. It should be noted that this definition is subject to change when the SFRA is updated.

2.1.4 Sewers

Flooding from sewers happens when the volume of rainwater exceeds the capacity of the sewer network. This can happen because the rainfall event exceeds the capacity that the sewer network was designed to cope with or as a result of a failure, such as a blockage, somewhere in the system. Either of these issues can result in sewers backing up, surcharging, and causing overland flow. The sewer network in Hillingdon is primarily separate surface water and foul water systems, managed by Thames Water Utilities Limited (Thames Water).

Sewer flooding can be highly complicated to understand as the network of sewers is extensive with some parts of the system not mapped. Further, there are areas of combined sewers where foul and surface water discharge to the same network; these carry a greater risk as excess rainfall that overloads this type of sewer can result in surcharging of foul sewage.



source: <https://www.bbc.co.uk/news/uk-england-oxfordshire-55951338>

2.1.5 Artificial sources

Flooding from artificial sources occurs because of a failure of built infrastructure. Reservoirs and canals are potential sources of artificial flooding. Charville Lane FSA (Flood Storage Area), Spout Lane Lagoon, and Ruislip Lido are reservoirs that could cause flooding to areas of land within Hillingdon as a result of failures in infrastructure.

The Grand Union Canal also runs through Hillingdon which is another potential source of artificial flooding. The areas within Hillingdon susceptible to these sources of artificial flooding can be seen here and in the Environment Agency's [map of flood risk from reservoirs](#). Further information is available on the [Reservoir Flood Map Search Facility](#) from the Department for Environment, Food & Rural Affairs (DEFRA) Data Services Platform.

2.2 Recent flooding history

Hillingdon experienced heavy rainfall over winter 2013-2014 which led to a number of flooding incidents across various locations. There was not one single cause with flooding identified from rivers, including the River Colne, surface water and groundwater. In some instances, the floodwaters were persistent and remained for a long period of time due to the difficulty of areas draining back to the river once waters had receded.

In July 2014 and again in June 2016, large volumes of rainfall falling in a short period of time caused primarily surface water flooding. In both instances there was internal flooding of properties, flooding of roads and key infrastructure, including London Underground stations.

Through the course of 2020 and 2021, areas surrounding Bessingby Park in Ruislip, were impacted by flooding on several occasions. A flood investigation was carried out, following the Act [Section 19 guidelines](#), which concluded that the primary cause of flooding was sewer flooding from surface and foul water sewers in Bessingby Park. This investigation led to a collaboration of authorities that resulted in a new flood alleviation measure being completed by the Council in 2022 within the park.

As a LLFA the Council is required to undertake and publish an investigation into flood events where it is 'necessary or appropriate' to do so (Section 19 of the Act). It is important to understand that not every incident of flooding will be investigated via Section 19. In general terms, it will be the larger scale events that will warrant investigations of the magnitude set out in the Act.

Further information on previous flooding in Hillingdon and details of flood investigations undertaken can be found [here](#). Guidance on when investigations will be carried out will be developed further through this Strategy.

2.3 Theme Actions: Sources of Flooding

Objective	Improve knowledge of flood risks in the London Borough of Hillingdon
Action A1	Maintain an upto date record of flood risk data ensuring this is available for others to use.
Action A2	Develop and maintain a method for sharing and recording flood reports with internal departments and external partners.
Action A3	Work with external partners to ensure their records of flooding events, including investigations, are available to the Council.

Action A4	Review the threshold criteria for flood investigations and continue to carry out flood risk investigations when flooding reaches the Section 19 threshold.
Action A5	Use updates to modelling, new information from feasibility studies, and reports of flooding to ensure flood risk information is kept relevant.
Action A6	Continue to use and develop innovative methods for capturing data on flood risk within the borough.

3 WORKING WITH OTHERS

3.1 Flood risks in Hillingdon

When flooding occurs, it is important to understand the source as that will dictate which of the relevant authorities needs to take a lead on finding a solution. The debate about the source of flooding can often be highly technical and sometimes disputed.

For example, extensive rain can overload drainage systems resulting in discharges to rivers being uncontrolled; the source of flooding can therefore be seen as either river flooding, i.e. the responsibility of the Environment Agency; or surface water flooding, i.e. the responsibility of the Lead Local Flood Authority; or the lack of capacity in a surface water drain i.e. the responsibility of Thames Water if it is their asset.

In 2007 there was extensive flooding in the UK leading to a comprehensive review, 'The Pitt Review'. One of the findings in the report highlighted the disparate nature of flood risk management reflected in the examples above:

"Many of the people affected by the events of summer 2007 did not know who to turn to and their problems were passed from one organisation to another."

Although it can be frustrating for those who flood, it is important to determine the source of flooding to ensure that solutions can be achieved. The key is to make this process as streamlined and efficient as possible.

The Pitt Review ultimately led to the Act in 2010 and the defining of Lead Local Flood Authorities to take a greater leadership role in organising the risk management authorities into achieving a common purpose. Considerable progress has been made on the collaborative working between each of the authorities to make the process more efficient, but more can be done.

"The Review believes that the role of local authorities should be enhanced so that they take on responsibility for leading the coordination of flood risk management in their areas. Local authorities already have a substantial role because of their responsibilities for ordinary watercourses, drainage, highways and planning. Their place-shaping role and local democratic accountability will help to ensure that the right local action is taken."

Pitt Review: Lessons from 2007 Floods



Who's responsible for managing flood risk?

Property owner

The property owner is responsible for private drainage and surface water up to the boundary of the property. They may also want to consider property flood resilience (PFR) measures to protect their property from flood damage.

Watercourse (riparian) ownership

You own a watercourse if it runs adjacent to, through, or under your property. This includes both main rivers, and ordinary watercourses such as streams, culverts and ditches. You are responsible for maintaining the natural flow of water and reporting incidents such as blockages and flooding.

Main river and coastal flooding

The Environment Agency (EA) is responsible for managing the risk of main river and coastal flooding. Main rivers are those which are designated as such on the EA's Main River Map. To report incidents and flood risk issues, call the Incident hotline on 0800 80 70 60. To sign up for flood warnings, call Floodline on 0345 988 1188.

Groundwater flooding

The Lead Local Flood Authority (LLFA) are responsible for managing the risk of groundwater flooding. This can occur when periods of prolonged rainfall cause the water table to rise and emerge in basements or above ground.

Public sewers and utility pipes

Water companies (e.g. United Utilities) are responsible for managing the risk of flooding from public sewers and utility pipes. This includes shared sewer pipes where they meet between properties before joining the public sewer.

Highway gullies and drains

Highway roads, footpaths, drains and gullies are the responsibility of the local highway authority which will be either the County Council or the Unitary Authority.

Major roads and motorway drainage

Responsibility of Highways England.

Surface water flooding

The Lead Local Flood Authority (LLFA) are responsible for managing the risk of surface water flooding. This can occur when the capacity of drainage systems on land or roads is exceeded by heavy rainfall.



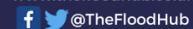
This resource has been produced by Newground who work in partnership with the Environment Agency

Lead Local Flood Authority (LLFA)

The Lead Local Flood Authority is either the County Council or the District Council (provided it is a Unitary Authority). They are responsible for managing flood risk from ordinary watercourses, surface water and groundwater, and for investigating all flooding incidents where deemed necessary.

Last reviewed: March 2021

For more information visit:
www.thefloodhub.co.uk



3.2 Hillingdon Council – The Lead Local Flood Authority

Hillingdon Council plays a key role in managing local flood risk within Hillingdon, with responsibilities shared across different internal departments, for example the Hillingdon Highways Team are responsible for highway drainage on public roads not managed by TfL.

Importantly Hillingdon Council, as the Lead Local Flood Authority (LLFA), have the following responsibilities, outlined under the [Flood and Water Management Act \(2010\) \(FWMA\)](#):

- Prepare and maintain a Local Flood Risk Management Strategy (LFRMS).
- Perform works to manage local flood risk, within the authority area, such as flood alleviation schemes (FASs).
- Maintain an asset register, which records features in Hillingdon with a significant effect on flooding.
- Undertake flood investigations when a flooding event occurs which meets the flood investigation criteria.
- Maintain the flow of ordinary watercourses, which includes regulating developments and structures which could affect an ordinary watercourse.
- Provide advice as a statutory consultee on surface water drainage proposals of major developments for Hillingdon's Local Planning Authority (LPA).

The LLFA also has responsibilities under the Flood Risk Regulations (2009) (FRR):

- Determining whether there is a significant flood risk in its authority area, identifying where the risk is located (flood risk areas) and detailing this within a Preliminary Flood Risk Assessment (PFRA).
- Preparing in relation to each relevant flood risk area a flood hazard map, and a flood risk map.
- Prepare a flood risk management plan in relation to each relevant flood risk area.
- Co-operate with any other relevant authority which is exercising its function under the FRR.

In the context described above, the LLFA is a statutory function of the Council. It therefore ensures that the Council meets its legislative obligations but also independently analyses the work of the Council and other responsible authorities.

3.2.1 Catchment Plan

[The Catchment Plan](#) is a recent project by Hillingdon Council to help the implementation of flood mitigation measures across Hillingdon. It was produced in response to significant flooding that occurred in Hillingdon in 2016, with a combination of sources of flooding across disparate locations making it clear that no single flood defence would protect against all risks.

It was identified that a holistic approach was required. Funding from the Environment Agency was secured, and the Catchment Plan was created. It provides an evidence base of

locations where action is required to manage flood risk, a review of how these areas are prioritised, and potential opportunities for work.

3.2.2 Partnership working

Hillingdon Council, as part of its flood risk management work, is involved in a number of partnerships. Different partnerships serve different purposes but contribute to the overall collaboration and efficient information sharing required for effective flood risk management.

The **Northwest London Strategic Partnership** is formed of six London Boroughs (Barnet, Brent, Ealing, Harrow, Hillingdon and Hounslow) along with the Environment Agency and Thames Water Utilities Limited (Thames Water). The Partnership meets quarterly to discuss flood risk matters, including project opportunities and updates, funding opportunities, and changes to legislation. An elected council member also represents the partnership on the Thames Regional Flood and Coastal Committee (RFCC).

RFCCs were established by the Environment Agency under the Act to bring together independent members and those appointed by Local Authorities for three purposes:

- To ensure coherent plans are in place for identifying, communicating, and managing flood risk across catchments.
- To encourage efficient, targeted, and risk-based in flood risk management that represents value for money and benefits local communities.
- To provide a link between the Environment Agency, LLFAs, and other relevant risk authorities to share and widen the knowledge base.

Hillingdon is within the Thames region and is represented on the **Thames RFCC**. Main committee and sub-committee meetings are held quarterly where partners can discuss and update on flood schemes. Importantly, the Thames RFCC also decides on the Environment Agency funding allocations for projects (including local levies).

More information on the Thames RFCC can be found [here](#).

The **Crane Valley Partnership (CVP)** is an association of charities, community groups, councils, businesses and government agencies working in the River Crane catchment area. Hillingdon Council is a landowner within the Crane Valley catchment and so is involved in the Core Strategic Group, supporting the broader Project Delivery group working on various projects within the catchment. The CVP works on restoration of the River Crane, conserving surrounding habitats and improving public access for the benefit of nearby communities.

The **London Drainage Engineers Group (LoDEG)** is an organisation representing the interests of those within London Councils with highway drainage and flood risk responsibilities. Meetings are held quarterly and attended by LLFAs, the Environment Agency, Thames Water Utilities Limited, TfL and Thames Flood Advisors among others. The meetings provide an opportunity for sharing flood risk management practice and enable collaboration and potential resolution of issues between relevant RMA.

3.3 Environment Agency

The Environment Agency is the national flood risk authority for the UK. Main rivers, as designated by the Environment Agency, are a statutory type of watercourse and are under their regulatory control. They have permissive powers to carry out maintenance on main rivers and is responsible for ensuring that the riparian owner carries out their duties on a main river. Importantly, there are statutory enforcement powers allowing the Environment Agency to ensure main rivers are unobstructed and free flowing. They also have overview of all sources of flooding and coastal erosion as defined under the Act. The map of the designated main rivers can be viewed [here](#).

Further general Environment Agency responsibilities on flood risk management are:

- Delivering flood risk warnings.
- Producing maps for flood risk and providing data.
- Providing consent for, and enforcement of, works near or within main rivers.
- Producing guidance on Flood Risk Management Plans (FRMPs).
- Supporting other RMAs in delivering projects by providing resources and allocating government funding.

3.4 Thames Water

Thames Water Utilities Limited ('Thames Water') is the sewerage provider for Hillingdon. Thames Water has responsibility for the management of flood risk in relation to the drainage network. This includes managing any potential failures of their infrastructure that may cause flooding and ensuring sufficient maintenance of public sewers is carried out to reduce the risk of flooding from sewers. Thames Water is also a supplier of clean water in Hillingdon, along with Affinity Water. Clean water supply has the potential to be a source of flood risk from burst water mains, but this is outside the scope of the Strategy.

Leaks can be reported to the appropriate water supplier. The Water UK website can be used to [find the water supplier at specific locations](#).

3.5 Category One Responders

Category One responders have responsibilities under the [Civil Contingencies Act \(2004\)](#) when a major flooding incident is declared. They are directly involved in the management and delivery of the response. Category One responders in Hillingdon include:

- Hillingdon Council
- Emergency Services
- Environment Agency

Depending on the circumstances of the incident, other organisations may be involved in the response to the incident. Hillingdon Council is required to produce a Multi-Agency Flood Plan (MAFP), owned and maintained by the Emergency Planning Team. The MAFP outlines

the delivery of the emergency response and co-ordinates the actions of responding agencies.

3.6 Highways

The responsibility for the drainage on highways depends on their ownership and management, which is outlined below:

Highway drainage and asset management	Risk Management Authority		
	Transport for London	National Highways	Hillingdon Council
Red routes	✓		
Motorways		✓	
Other adopted highways			✓

National Highways is the national organisation charged with operating, maintaining, and improving England's motorways and major A roads. The M4 and M40 runs through parts of Hillingdon, and form sections of the strategic road network that National Highways manages.

Transport for London (TfL) manages a network of major roads in the capital, referred to as red routes, which carry up to 30% of London's traffic. A map of red routes can be found on the [TfL website](#). In Hillingdon the roads that TfL are responsible for are the A4, A30, A40, A312, A437, and West End Road (A4180).

Hillingdon Council manages the majority of local roads that are known as adopted highways which incorporate a large drainage network some of which is within the remit of Thames Water.

There are some local roads that are not adopted highway and outside the control of the Council. Responsibility for these roads varies and depends on covenants and legal agreements.

3.7 Landowners

Landowners are responsible for the drainage on, and from, their land and property and should implement measures to prevent them from flooding. Any measures that are put in place should not increase the flood risk to surrounding land and property.

Private landowners with land or property next to a river, stream or ditch have responsibilities as 'riparian landowners'. Water must be able to flow without obstruction, pollution or diversion that may affect the rights of others. Private landowners have a duty to keep any structures, such as culverts or trash screens, free of debris. If private

landowners have flood defences on their land, communication with the relevant risk authority about maintenance is important as they may play a significant role in flood protection.

Heathrow Airport is in the south of Hillingdon and covers over 1000 hectares. This makes Heathrow Airport Holdings Limited, which owns and runs the airport, a major landowner within Hillingdon and responsible for drainage and flood risk management of a significant area of Hillingdon.

3.8 Theme Actions: Roles and Responsibilities

Objective	Improve the collaboration of Risk Management Authorities, and understanding of roles and responsibilities, to manage flood risk effectively
Action B1	Host quarterly meetings of a flood group for internal Council departments to share relevant updates for flood risk, discuss projects and potential opportunities for collaboration.
Action B2	Host quarterly meetings with external bodies, Thames Water and Environment Agency to discuss ongoing work, changing flood risk, investigations, and opportunities for collaborative working.
Action B3	Provide support to communities through flood action groups (FLAGS) to ensure flood risk at a local level is understood and preparedness is in place.
Action B4	To work with the Council’s emergency response unit to ensure that access to forecasting and warning is up to date and fit for purpose.
Action B5	To work with Thames Water and the Environment Agency to secure a list of Hillingdon specific actions to be hosted on the Council website alongside the Strategy.
Action B6	To ensure flood risk assets are maintained appropriately, effectively, and routinely.

4 OPPORTUNITIES AND PROJECTS

4.1 Managing flood risk sustainably

With future changes to the climate, there will be a greater risk of flooding as a result of more frequent and more intense periods of rainfall. Combined with this is a range of problems that are already present. For example, large scale loss of gardens and an increase in hardstanding results in a reduction of space for water to be stored in a time of flood. The drainage network, as throughout London, is ageing and has constrained capacity that struggles to cope with the frequency of the intense rainfalls.

Carefully located and planned flood risk projects can provide considerable flood attenuation benefits. In addition, there are opportunities to reconsider where flood water can be stored in a time of flood, for example through the use of open space land. Identifying opportunities and projects are essential to facilitating a positive response to the growing risk of flooding.

Flood risk management in Hillingdon should aim to:

- Reduce risk in areas at greatest risk of flooding to ensure investment is used effectively
- Use sustainable drainage systems (SuDS) and natural flood management (NFM) where possible
- Share knowledge on flood risk and what work is being undertaken with the public, as to how they can be involved and protect themselves, property and business
- Work with partners to provide a collective response to flood risk management

Flood alleviation schemes should have multiple benefits: social and economic benefits of preventing property and businesses from flooding is generally accepted, but clever approaches can secure significant environmental benefits too such as opportunities for greater biodiversity.

Sustainable drainage systems (SuDS) are a method of water management that can be deployed to reduce flood risk. The purpose of a SuDS is to manage runoff as close to its source as possible to mimic natural drainage. This promotes infiltration and the attenuation of water to reduce the subsequent load on sewer systems.

[The SusDrain website](#) provides further information and explanations of the different types of SuDS, along with diagrams and images.

Further information on SuDS, including their benefits, can be found on the [Local Government website](#).

Natural flood management (NFM) is the use of natural processes to manage the risks from flooding; both NFM and SuDS seek to reduce flood risk by achieving drainage rates closer to the natural state, but NFM takes a wider approach with fewer engineering interventions

than SuDS and is more commonly associated with managing fluvial flooding than surface water flood risk. Getting away from hard engineering, towards more natural methods of flood risk management, also allows for more interventions in a catchment.

4.2 Funding

The Department for Environment, Food and Rural Affairs (DEFRA) is a major source of funding for LLFAs to carry out projects through its Flood and Coastal Erosion Risk Management (FCERM) Grant in Aid (GiA) fund. The LLFA can also apply for Local Levy funding. This is managed by the Thames RFCC and raised through a levy on Local Authorities, and is supported by the Environment Agency.

Funding can be one of the primary barriers to the development and delivery of flood management projects which means that funding from third parties, or partnership funding, can be an important additional source. This could be from community groups, charity organisations or from land or property owners involved in a scheme, or partners such as Thames Water.

4.3 What has been done

Hillingdon Council has undertaken a variety of projects, working with an array of partners, to alleviate flood risk.

The following 'project sheets' provide more detail on those most recently completed and relate to:

- Bessingby Park, Ruislip
- Cannon Brook and Mad Bess Brook, Ickenham
- Eastcote Town Centre, Eastcote
- Elephant and Court Park, Hillingdon
- 'Green Blue You', Hayes
- Park Wood Natural Flood Management, Ruislip

Other risk authorities have also undertaken extensive work in the borough. The Council is working with these partners to provide similar detail to those provided subsequently to allow all the information to be stored in one place.



Bessingby Park Flood Alleviation Scheme

Bessingby Park, Ruislip, HA4 9BU

Autumn 2022

Bessingby Park and adjacent properties have flooded on multiple occasions in the past few years. This flooding was attributed to the impacts of climate change and lack of capacity in the sewers. Several issues were identified within the Thames Water network, including a blockage and partial collapse of the surface water sewer in the southeast of Bessingby Park.

The project used principles of Natural Flood Management (NFM) and Sustainable Drainage Systems (SuDS).

The scheme provided approximately 500 m³ of capacity for retaining water during flood events in two basins. The basins were fringed with wildflowers and other planting to create a biodiverse habitat.

The project was delivered with funding from the Mayor of London's Grow Back Greener Fund and Thames Water.



Bessingby Park Basins

Photos taken prior to planting but showing the newly created basins



Cannon Brook and Mad Bess Brook Flood Alleviation Scheme

Cannon Brook Catchment

2021 – 2024

Residents living near the River Pinn in Ruislip have suffered many flood events in recent years, notably in 2016.

The River Pinn is prone to fast, flash flooding and numerous surface water outfalls drain directly into it, causing it to burst its banks in times of high rainfall. Invasive species which damage the ecological health of the riverbanks are also an issue.

The London Borough of Hillingdon partnered with Thames 21 on a two-year project which aimed to engage the community, reduce flood risk, and increase biodiversity.

Sections of the Cannon Brook, a Pinn tributary, was restored to increase water storage on the floodplain and slow the flow.

This project is part of a wider package of works around the Cannon Brook and Mas Bess Brook catchment.

Alongside the interventions on the watercourses, property flood resilience (PFR) measures have also been provided to the most at risk homes and further interventions are planned in 2024.

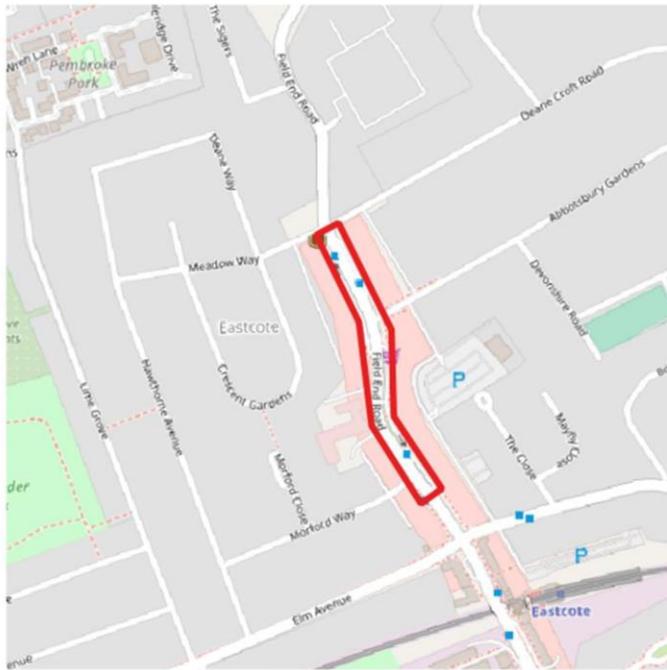


Increasing capacity on Cannon Brook

Source: Thames 21.



Eastcote Town Centre Raingardens



[Eastcote Town Centre, Pinner, UB3 4EW](#)

[Summer 2019](#)

Several raingardens were designed and implemented as part of the Eastcote Town Centre improvement and the London Strategic Sustainable Drainage Systems (SuDS) Pilot.

The aim of the scheme was to provide flood alleviation and improve amenity in an urban area. Residents and business in Eastcote Town Centre have suffered from frequent surface water flooding in the past when the sewer systems become overwhelmed in high intensity rainfall events.

Approximately 50 m³ of surface water storage was provided through the raingardens which were planted with shrubs, perennials, bulbs, and ornamental grasses.

The raingardens have also provided an opportunity for education, with school trips organised to view the raingardens in action.

The raingardens represent how above ground drainage solutions can be established in an urban area. They have secondary functions as a benefit to wildlife and as an attractive feature within an urban centre.



Eastcote Raingardens

Source: Landscape Institute





Elephant Park and Court Park Flood Alleviation Scheme

Elephant Park, Uxbridge, UB10 9AT

Court Park, Uxbridge, UB10 9JX

Summer 2022

A suite of measures was proposed to reduce the risk of surface water flooding to residential properties in Hillingdon with the secondary benefit of creating a more biodiverse space.

Modelling indicates that 54 houses were better protected from flooding due to these two schemes, which was supported with funding from the Environment Agency.

In Elephant Park, a meandering swale of approximately 200 m in length was constructed. To do this, 1,000 m³ had to be excavated but all of it was repurposed on site to create mounds. Seeding and wildflower planting was undertaken on these mounds. A successful community planting day for the swales was organised by the Green Spaces Team.

In Court Park, a range of features were built. These included a new swale, two bunds and two ponds. Similarly, to Elephant Park, this scheme was designed to increase capacity of water outside of the sewer systems.

These are examples of a more creative use of open space to achieve flood risk and biodiversity benefits whilst retaining the recreational purposes of the parks.

Importantly, they show that flood risk projects don't need to be hard engineered costly schemes.

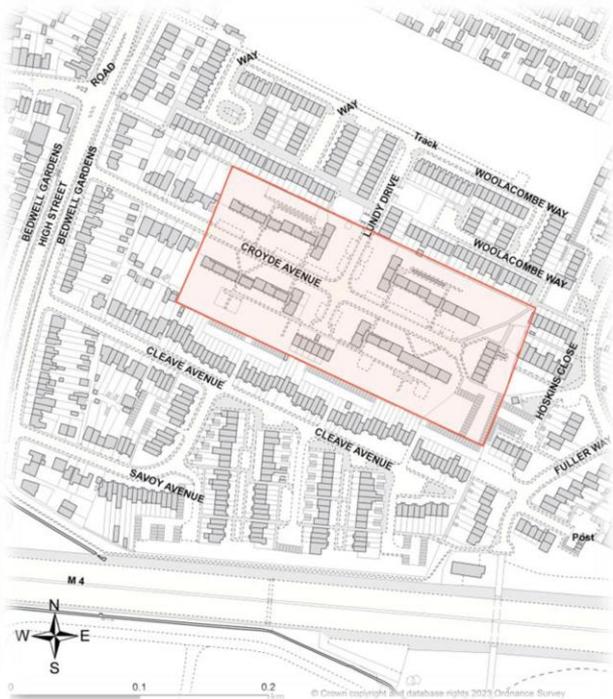


(above) A swale on a naturalised path that will become a significant biodiverse feature when planting matures

(below) a holding pond to store excess water at a low part of the park



Green Blue You Hayes



Croyde Avenue Estate, Hayes, UB3 4EW

2021 - 2024

Groundwork London is implementing this GLA-funded project in partnership with the London Borough of Hillingdon, which is due to complete in March 2024. The project is focused on 6 blocks of the Croyde Avenue Estate.

Green Blue You aims to reduce flood risk, alleviate pollution to water courses, improve and create green (and blue) habitats. The project has worked with residents to create a more biodiverse estate. It has also provided opportunities to volunteer and learn in the green skills space. The neighbourhood will benefit from new sustainable drainage, new informal play features and improved green spaces through wildlife enhancements.

The London Borough of Hillingdon are currently developing Sustainable Urban Drainage Systems (SuDS) around the catchment with funding from the Environment Agency. These will be delivered over coming years.



Green Blue You Visualisation

Source: Groundwork London

Park Wood

Natural Flood Management Phase 1



Park Wood (SSSI), Ruislip, HA4 7XT

2018 – 2021

This project was one of four community scale NFM pilots using funding from Department for Environment, Food and Rural Affairs (DEFRA). It was delivered in partnership by Thames21, the London Borough of Hillingdon and the local community including the Ruislip Woods Management Advisory Group (RWMAG) and the North Ruislip Flood Action Group (NRFLAG). The project aim was to reduce the risk of flooding to downstream properties, such as those along Park Avenue and Broadwood Avenue.

The works involved the installation of at least 40 leaky dams in the wood, which is a designated Site of Special Scientific Interest (SSSI) and a National Nature Reserve. Leaky dams mimic the natural obstruction caused by trees or branches falling into rivers. They work to slow the flow of water during periods of heavy rainfall. They also reduce soil erosion which helps to improve water quality downstream.



Leaky dams in Park Wood (SSSI)

Source: NRFLAG (above) and London Borough of Hillingdon (right).

4.4 What is being done

In addition to work already completed by the Council, there are a number of projects currently being actively investigated. These projects are in different stages and will be reported on annually and added to as more projects come forward.

4.4.1 Northwood: Joel Street Ditch Flood Alleviation Scheme

Flood modelling and options evaluation have been undertaken for the Joel Street Ditch catchment with the aim of identifying opportunities for SuDS to address recent surface and fluvial flooding from the Joel Street Ditch. The results of this modelling are now being explored by the Council to inform further work with the Environment Agency on possible solutions.

4.4.2 South Ruislip: Spider Park

The Rewilding Spider Park project has involved a number of stages providing multiple and various benefits. 8000 tree whips have been planted, areas of grass are left uncut and managed as hay meadow, pond restoration has taken place and a new swale created, all as part of biodiversity enhancement completed in March 2023. A feasibility study looking at flood management opportunities in the park was completed in September 2023. This has informed the next stages of the project which would involve the progression of river restoration works on the Yeading Brook.

4.4.3 Ruislip: Brook Drive SuDS

An investigation and assessment of the opportunities for flood risk measures on Brook Drive were carried out in 2020. Following this, Hillingdon Council submitted a successful bid for funding from the Thames Water Surface Water Management Programme. Workshops were held with the community to establish priorities for the project. A concept design has been produced for the first phase of the project, which is to implement raingardens on Kings College Road, upstream of Brook Drive. The raingardens would store surface water and reduce the volume of water entering the sewer system. Construction of this project is planned for 2024.

4.4.4 Hayes End: Kingshill Avenue flood alleviation project investigation

Outputs from the Hillingdon Catchment Plan have identified the Hayes End and Kingshill Avenue catchment as having a high number of properties at risk of surface water flooding. The catchment is served by a Thames Water surface water sewer network that discharges into a tributary of the Yeading Brook. There have been historic issues with surface water flooding; however, it is unclear how the surface water sewer network plays a role in this.

In addition, it is unclear what the role of downstream restrictions in the ordinary watercourse and main river network has on the risk of flooding. To better understand the integrated flooding, the London Borough of Hillingdon will be undertaking a feasibility study to identify opportunities for flood alleviation.

This study is funded by the Environment Agency

4.4.5 Pinkwell: Frogs Ditch Catchment

The Frogs Ditch is a main river in the south of the borough. It is a mix of open channel and culverted sections that ultimately discharge into the River Crane that forms the eastern border of the borough.

Modelling undertaken indicates up to 278 properties within the catchment are affected by flooding, 74 of which from an upstream flow route at Pinkwell Park to the Frogs Ditch. Other areas of note include the M4 Motorway and Cranford Park at risk of flooding.

Climate change projections indicate an increase in rainfall intensity over the coming years which is expected to increase the frequency at which properties in the catchment flood.

The Council has commenced work on a proposal to be put to the Environment Agency to secure further funding for a flood alleviation scheme within Pinkwell Park. If approved, a detailed scheme would then be drawn up with a project to follow, potentially in 2025.

4.5 Theme Actions: Opportunities and Projects

Objective	Identify and implement opportunities for flood risk management
Action C1	In collaboration with other internal council departments and Risk Management Authorities, maintain a list of funding opportunities. Use this to identify and secure appropriate funding for flood risk management schemes within the borough.
Action C2	Maintain mapping showing where flood risk management projects are being undertaken, opportunities have been identified, and include priority areas based on historic flood events and risk analysis.
Action C3	Support other internal council departments in their delivery of flood management schemes.
Action C4	Use flood incident information along with identified priority areas to inform the location and delivery of targeted schemes. Secure additional funding for delivery of flood alleviation schemes.
Action C5	Ensure that flood risk opportunities and projects are reflected in the Council's Climate Change Adaptation plans.

5 NEW DEVELOPMENT AND PLANNING

5.1 Planning policy

Planning policy has an important role to play in flood risk management in terms of ensuring development is not at risk of flooding, that it does not increase flood risk elsewhere and also contributes to managing flood risk.

5.1.1 Strategic Flood Risk Assessment

The [Flood Risk and Coastal Change Planning Practice Guidance \(PPG\)](#) requires Local Planning Authorities (LPAs) to apply a risk-based approach to understand and manage flood risk from all sources. As part of this, LPAs are required to produce Strategic Flood Risk Assessments (SFRAs). The purpose of an SFRA is to assess the current and future risk to an area from flooding from all sources, taking account of climate change and the impact of land use and development changes. The SFRA provides the evidence base for planning decisions related to flood risk.

5.2 Development and SuDS

Planning applications (where appropriate) are required to demonstrate the use of SuDS in accordance with a number of policies:

- [National Planning Policy Framework \(Paragraphs 159-169\)](#)
- [Flood Risk and Coastal Change Planning Practice Guidance](#)
- [London Plan Policies SI 12 and 13](#)
- [Non-statutory Technical Standards for Sustainable Drainage Systems](#)
- [Hillingdon Local Plan Policies EM 1, EM 6, DMEI 9 and DMEI 10](#)

The Lead Local Flood Authority (LLFA) has a statutory duty to review the proposed drainage elements of major planning applications under the [Flood and Water Management Act \(2010\) \(FWMA\)](#). Major planning applications are defined as:

- Developments of 10 or more dwellings
- A site area of 0.5 ha or greater
- Buildings with a floor space of 1,000m² or greater

The LLFA will provide comments on the proposed surface water drainage strategy of the development along with proposed measures for the management of flood risk to the site. The Environment Agency will also be consulted with respect to any development within 8m of a main river or in Flood Zone 3 (a or b).

The LLFA, as part of the planning application process, will review:

- If the drainage hierarchy set out in the [London Plan \(2021\)](#) is being adhered to and that the most sustainable drainage features possible have been proposed.

- If the proposed runoff rates are equal to or lower than greenfield runoff rates, or as close as reasonably practical with sufficient justification.
- If sufficient calculations supporting greenfield, existing and proposed runoff rates for 1 in 1 year (100% chance of occurrence each year), 1 in 30 year (3.3% chance of occurrence each year) and 1 in 100 year (1% chance of occurrence each year) rainfall events are provided, with an [appropriate climate change allowance](#).
- If the proposed attenuation storage volume meets or exceeds the required attenuation storage volume for the site.
- If maintenance tasks of proposed SuDS (including actions and frequencies) and a maintenance provider have been stated.

All of this information, along with sufficient supporting evidence, should be submitted in a formal planning application made to the local planning authority.

The applicant is also required to complete and submit the [Hillingdon Sustainable Drainage Proforma](#) and, dependent on the size of the development and Flood Zone it is in, a flood risk assessment. More information on the requirements for flood risk assessments can be found [here](#).

5.2.1 Schedule 3 and SuDS Approval Body

In January 2023 the government announced the implementation of Schedule 3 of the [FWMA](#), expected to come into effect in England during 2024. Schedule 3 will require the use of SuDS within new developments over 100m² to be formally approved by the SuDS Approval Body (SAB). This is a separate consenting regime outside of the planning permission permission.

The SAB will have a similar role to the local planning authority, but solely for the drainage arrangements of a new development. Drainage will therefore be a consideration for both the local planning authority and the SAB. There is limited guidance at present as to the exact implications for the SAB but it will invariably be a significant change in how SuDS are considered within new development.

The Strategy will be updated in due course once there is clarity over the SAB role.

5.2.2 Biodiversity Net Gain

Biodiversity Net Gain (BNG) is an approach for developing land whilst contributing to the recovery of nature. BNG refers to ensuring the natural environment is in better condition than prior to the development by creating or enhancing habitats in association with development. BNG can be achieved on-site, off-site or through a combination of both. Under the [Environment Act 2021](#), all planning permissions granted in England, with some exemptions, will have to deliver at least 10% BNG from January 2024. BNG will be measured by DEFRA's metric and further information on this can be found on [the government website](#). [Hillingdon Local Plan](#) Policy EM7 sets out how Hillingdon's biodiversity will be preserved and enhanced.

Further information on BNG can be found on the [Local Government Association website](#).

The National Planning Policy Framework requires Local Planning Authorities to consider green infrastructure (GI) in local plans and in new development. GI refers to a network of multi-functional green space, which deliver environmental and amenity benefits for communities. It can refer to a wide range of features, for example parks, playing fields, street trees and green roofs. The [Green Infrastructure Standards](#) have been developed by Natural England to help LPAs and developers meet the requirement to consider GI. The **Urban Greening Factor** is a tool to improve the provision of GI and increase the level of greening in urban environments. It is applied to major developments and sets a target score for the proportion of GI within a development site.

5.3 Theme Actions: New Development and Planning

Objective	Ensure that development within the London Borough of Hillingdon accounts for and mitigates flood risk with the aspiration to see a net reduction.
Action D1	Produce and maintain guidance for the Planning department on flood risk management, requirements for drainage strategies and all council policy associated with flood risk.
Action D2	Develop and maintain up to date guidance on the SuDS Approving Body for relevant internal Council departments. Ensure the relevant departments have awareness and understanding of the implications of implementation of Schedule 3.
Action D3	Ensure plans and planning decisions are informed by up to date flood risk information and developments are designed and located to minimise the risk of flooding.
Action D4	Ensure developments with an impact on flood risk assets are appropriately assessed with long term maintenance and management appropriately secured.
Action D5	Require developments to demonstrate that sustainable drainage systems have been implemented, where possible, for managing runoff.
Action D6	Ensure all guidance and standing advice on flood risk and planning is kept up to date and accessible.
Action D7	Undertake annual training for the Local Planning Authority on development and flood risk.

6 LOCAL COMMUNITIES AND FLOODING

6.1 How to reduce local flood risk

Managing flood risk is not the sole responsibility of the statutory authorities. Large scale interventions, projects or improvements to infrastructure can only generally be carried out by the statutory authorities but local action forms a vital part in the collective goal of managing flood risk effectively.

What residents do within their own properties can combine to make a significant difference. For example, in recent years, the large scale replacement of gardens with impermeable or hard surfacing has resulted in quicker runoff to the local drainage networks. The consequence is that more water is reaching the drainage network quicker than it can be managed resulting in increased levels of flooding.

It is important for residents to consider their use of external areas of property. Extending impermeable surfaces, such as driveways and paved gardens or even through the use of plastic grass can all contribute to increased speed of water runoff. Wherever possible, property owners should consider swapping out areas of impermeable cover for those which will allow water to infiltrate. Alternatively, options for storing rainwater, such as water butts, could also be considered as a way of slowing the speed at which water reaches the drainage network.

Along with actions for reducing overall runoff, there are measures that can be put in place specifically to protect properties from flooding. These are often termed **Property Flood Resilience (PFR) measures**. Examples include non-return valves on pipes to stop water flowing back into the property, the fitting of anti-flood airbricks or these of flood gates and barriers that can be erected prior to a possible flood event. The [National Flood Forum](#) website sets out methods for protecting property along with the typical costs involved. [The Blue Pages](#) website provides further information on property-level protection measures along with the standards and accreditation available for such measures. The Council strongly recommends residents check the PFR certifications before employing any flood protection devices.

It is not possible to completely remove the risk of flooding, but it is possible to mitigate the risk through certain considerations and mitigation measures.

6.2 How to report flooding

Reporting of flooding incidents is important so that a record can be kept, and appropriate action(s) are taken. Reporting flooding also makes it easier to establish locations where there may be a recurrent issue and helps with the prioritisation of solutions. Different types of flooding are the responsibility of different authorities. *Section 2.1* provides further information on this. The Council has committed to providing a more efficient way of reporting flooding and this will be developed in 2024.

How to report a flood	
For surface water flooding, groundwater and ordinary watercourses	<p>Hillingdon LLFA</p> <p>01895 556000 / 01895 250111 (after 5pm)</p> <p>Flood reporting tool</p>
For sewer flooding and blocked sewers	<p>Thames Water</p> <p>0800 316 9800</p> <p>Thames Water online reporting tool</p>
For flooding of main rivers or from the sea	<p>Environment Agency</p> <p>0800 80 70 60 (24/7)</p>
For blocked drains or gullies on highways managed by Hillingdon Council	<p>Hillingdon Highways</p> <p>Blocked gully reporting tool</p>
For blocked drains or gullies on highways managed by Transport for London	<p>Transport for London</p> <p>Street care reporting tool</p>
For blocked private drains or flooding from private drains	<p>Landowner / property owner</p>

6.3 Actions before, during, and after a flood

Improved community and individual knowledge of their risk of flooding improves awareness and enables preparedness. Residents and property owners can check the long-term risk of their area [here](#). In the event of a possible flood, residents can check the immediate risk to their property [here](#).

The Environment Agency can also be contacted for this information at **0345 988 1188** or by textphone **0345 602 6340**. The advice given by the Environment Agency on what actions should be taken before, during and after a flood are summarised below along with when actions should be triggered, i.e. linked to the types of flood warnings.

Before

- Prepare an emergency plan and share with anyone living in your property.
- Have an emergency kit ready to take with you.
- Find out how to turn off your gas, electricity and water supplies.
- Ensure insurance is in place
- Take detailed photos of valuables and property before flooding occurs for insurance purposes.

During

- Turn off gas, electric and water supplies.
- Avoid entering flood water, particularly if fast flowing or deep water.
- Do not drive through flood waters.
- Move valuables and furniture, if possible, out of reach of floodwaters. Vehicles should also be moved to higher places.
- Report the flooding incident to the appropriate authority so that any necessary action can be taken during the event.

After

- Don't return to flooded property until it has been declared safe to do so.
- Don't turn on utilities until these have also been checked.
- Take photos of damage and anything to be disposed of and contact the insurance provider.
- Report the flooding incident to the appropriate authority.

Would you know what to do in a flood?



**FLOOD
ALERT**

PREPARE

- Prepare a bag that includes medicines and insurance documents
- Visit www.gov.uk/check-flooding



**FLOOD
WARNING**

ACT

- Turn off gas, water and electricity
- Move things upstairs or to safety
- Move family, pets and car to safety



**SEVERE
FLOOD
WARNING**

SURVIVE

- Call 999 if in immediate danger
- Follow advice from emergency services
- Keep yourself and your family safe

Visit check-for-flooding.service.gov.uk/plan-ahead-for-flooding

#PrepareActSurvive

6.4 Community groups

Communities have an important role to play in local flood risk management. Local knowledge and understanding of flood risk and past flooding events is an important resource for the Council and can make flood risk management decisions and flood alleviation schemes more informed and effective.

Working as a group enables communities to collaborate with agencies and authorities that manage flood risk to address any concerns and tackle the issues affecting their local area.

One example of this can be through Flood Action Groups, made up of a core of local people acting as representatives for their wider community. Flood Action Groups are community-led and can be set up by any group of volunteers who wish to work together to raise and manage issues around flood risk. The [National Flood Forum website](#) has further information and guidance for [how to set up and Flood Action Group](#).

6.5 Theme Actions: Local Communities and Flooding

Objective	Engage with communities to develop the awareness of flood risk in local areas and improve their resilience
Action E1	Maintain a register of community groups that may be relevant to flood risk management, with the associated flood risk information, schemes and level of engagement. Provide information and support for community groups undertaking actions related to flood risk management.
Action E2	Undertake an engagement campaign alongside the annual review of the LFRMS to raise awareness of flood risk management and the roles that communities and residents can play.
Action E3	Attend appropriate community meetings along with other Risk Management Authorities to maintain regular contact with communities and support actions to address issues raised.
Action E4	Improve awareness and adoption of property level resilience measures for residents.
Action E5	Ensure lines of communication from Risk Management Authorities to residents during flooding events are clear and efficient.
Action E6	Keep information on flood alleviation schemes up to date and accurate for residents. Use appropriate communication and engagement channels to inform residents about project completion and successes.

APPENDIX A – ACTION PLAN

Sources of Flooding		Improve knowledge of flood risks in the London Borough of Hillingdon			
Ref	Action	Role	Partner	Timeframe	Process
A1	Maintain an up to date record of flood risk data ensuring this is available for others to use.	LLFA	Environment Agency	Ongoing	Check for changes in flood risk data, for example following national updates to modelling, and keep a timeline of the dates for updates (where known) to the datasets being used.
A2	Develop and maintain a method for sharing and recording flood reports with internal departments and external partners.	LLFA	Environment Agency Thames Water LBH Highways LBH Green Spaces National Rail TFL National Highways	Ongoing	Quarterly meetings with external partners Quarterly internal meetings with other key departments.
A3	Work with external partners to ensure their records of flooding events, including investigations, are available to the Council.	LLFA	Environment Agency Thames Water LBH Highways LBH Green Spaces National Rail TFL National Highways	Post flood event	Undertake post flood incident investigations in liaison with external partners.

A4	(a) Review the threshold criteria for flood investigations and (b) continue to carry out flood risk investigations when flooding reaches the Section 19 threshold.	LLFA		(a) Within one year (b) Post flood event	Review criteria for flood investigations Undertake investigations in accordance with approved criteria.
A5	Use updates to modelling, new information from feasibility studies, and reports to ensure flood risk information is kept relevant.	LLFA		Quarterly	Review flood incidents that have occurred. Review whether any Section 19 investigations have been carried out. Based on recent flooding history check threshold is appropriate and ensure it is being applied.
A6	Continue to use and develop innovative methods for capturing data on flood risk within the borough.	LLFA	Environment Agency Thames Water Community Groups	Ongoing	Review what data is currently being collected and monitored for flood risk, such as community reporting tools and sewer level monitors. Keep track of any new methods for monitoring identified by the Environment Agency, Met Office or that other Risk Management Authorities may be using or from research opportunities.
Working with Others		Improve the collaboration of Risk Management Authorities, and understanding of roles and responsibilities, to manage flood risk effectively			
Ref	Action	Role	Partner	Timeframe	Process
B1	Host quarterly meetings of a flood group for internal council departments to share relevant updates for flood risk, discuss projects and potential opportunities for collaboration.	LLFA	LBH Highways LBH Green Spaces LBH Housing (when appropriate)	Ongoing	Review attendance to flood group meetings. Identify any barriers to attendance. Review any feedback on meetings and any topics to be covered going forward.

B2	Host quarterly meetings with external bodies, Thames Water and Environment Agency to discuss ongoing work, changing flood risk, investigations, and opportunities for collaborative working.	LLFA	Thames Water Environment Agency	Ongoing	Review attendance to flood group meetings. Identify any barriers to attendance. Review any feedback on meetings and any topics to be covered going forwards.
B3	Provide support to communities through flood action groups (FLAGS) to ensure flood risk at a local level is understood and preparedness is in place.	LLFA	Community Groups	Ongoing	Provide guidance for FLAGS and engage quarterly to determine resource required and the assistance to be provided by the LLFA.
B4	To work with the Council's emergency response unit to ensure that access to forecasting and warning is up to date and fit for purpose.	LLFA	LBH Emergency Response Team	Annual	Review the information provided historically. Check the messaging of different Council teams and other Risk Management Authorities who might be putting information out to residents on flood risk management responsibilities.
B5	To work with Thames Water and the Environment Agency to secure a list of Hillingdon specific actions to be hosted on the Council website alongside the Strategy.	LLFA	Thames Water Environment Agency	Annual	Liaise with external partners to secure information on Hillingdon specific actions are hosted on the Council website alongside the LLFA actions i.e. within in this action plan.
B6	To ensure flood risk assets are maintained appropriately, effectively, and routinely.	LLFA	Environment Agency Thames Water LBH Highways LBH Green Spaces National Rail TFL National Highways		Secure information on maintenance and inspections from asset management bodies. Provide public guidance on the flood risk asset management regime and the roles and responsibility for the various authorities. Provide information on flood risk asset management regime where appropriate.

Opportunities and Projects		Identify and implement opportunities for flood risk management			
Ref	Action	Role	Partner	Timeframe	Process
C1	In collaboration with other internal council departments and Risk Management Authorities, maintain a list of funding opportunities. Use this to identify and secure appropriate funding for flood risk management schemes within the borough.	LLFA	Environment Agency Thames Water LBH Highways LBH Green Spaces National Rail TFL National Highways	Ongoing	Review what funding opportunities are known and used currently and update accordingly. Identify cross funding opportunities where appropriate, for example biodiversity net gain.
C2	Maintain mapping showing where flood risk management where projects are being undertaken, opportunities have been identified, and include priority areas based on flooding history.	LLFA	LBH GIS Team LBH Web Team	Ongoing	Review flood risk data and flood history to determine priority areas for identifying new projects.
C3	Support other internal council departments in their delivery of flood management schemes.	LLFA	LBH Green Spaces LBH Property Team LBH Housing LBH Highways	Ongoing	Establish current and future schemes being delivered by other departments. Update the mapping recording projects accordingly. Review what support is currently being provided and identify support that may be useful.
C4	Use flood incident information along with identified priority areas to inform the location and delivery of targeted schemes. Secure additional funding for delivery of flood alleviation schemes.	LLFA	Environment Agency Thames Water Funding streams	Ongoing	Continue to secure project funds to identify and deliver new projects in collaboration with communities and external partners.

C5	Ensure that flood risk opportunities and projects are reflected in the Council's Climate Change Adaptation plans.	LLFA		Ongoing	Check that flood alleviation schemes have been assessed against climate change targets and where improvements can be made.
New Development and Planning		Ensure that development within the London Borough of Hillingdon accounts for and mitigates flood risk			
Ref	Action	Role	Partner	Timeframe	Process
D1	Produce and maintain guidance for the Planning department on flood risk management, requirements for drainage strategies and all council policy associated with flood risk.	LLFA		Ongoing	Review what information is already available and use this to produce updated guidance. Undertake annual refresher training or when changes to flood risk policy are implemented.
D2	Develop and maintain up to date guidance on the SuDS Approving Body for relevant internal council departments. Ensure the relevant departments have awareness and understanding of the implications of implementation of Schedule 3.	LLFA		When Schedule 3 is to be implemented	Monitor the progress of implementing Schedule 3 of the Flood and Water Management Act 2010. Develop guidance and undertake internal training on the processes involved. Update the LFRMS to reflect the legislative requirements of Schedule 3 implementation when appropriate.
D3	Ensure plans and planning decisions are informed by up to date flood risk information and developments are designed and located to minimise the risk of flooding.	LLFA	Environment Agency	Ongoing	Check that the Planning Team are using the most current SFRA and applying current policy related to flood risk (such as the London Plan Policy SI 13 or Local Plan policy).

D4	Ensure developments with an impact on flood risk assets are appropriately assessed with long term maintenance and management appropriately secured.	LLFA	LBH Planning	Ongoing	Review planning applications and provide appropriate commentary and guidance to the Local Planning Authority.
D5	Require developments to demonstrate that sustainable drainage systems have been implemented, where possible, for managing runoff.	LLFA	LBH Planning	Ongoing	Review planning applications and provide appropriate commentary and guidance to the Local Planning Authority.
D6	Ensure all guidance and standing advice on flood risk and planning is kept up to date and accessible.	LLFA	Environment Agency	Ongoing	Review the standing advice in liaison with the Environment Agency and develop internal guidance to facilitate efficiencies within the planning function.
D7	Undertake annual training for Local Planning Authority on development and flood risk.	LLFA	Environment Agency	Annual	<p>Ensure training is given to planning department to ensure officers understand the latest position on planning and flood risk.</p> <p>Work with partners to secure training for flood risk sources not within the remit of the LLFA, i.e. the Environment Agency.</p>

Local Communities and Flooding		Engage with communities to develop the awareness of flood risk in local areas and improve their resilience			
Ref	Action	Role	Partner	Timeframe	Process
E1	Maintain a register of community groups that may be relevant to flood risk management, with the associated flood risk information, schemes and level of engagement. Provide information and support for community groups undertaking actions related to flood risk management.	LLFA	Community Groups	Ongoing	Liaise with the community engagement team to assess whether an up to date register of community groups is being used. Use this to compile a list of relevant groups. Provide commensurate levels of support and assistance to groups that are associated with priority flood risk areas.
E2	Undertake an engagement campaign alongside the annual review of the LFRMS to raise awareness of flood risk management and the roles that communities and residents can play.	LLFA	Engagement Team	Annual	Use the production of the annual status report of the LFRMS to raise awareness of flood risk, provide an update on the work of the LLFA and external partners, and publish information on what residents can do 'before, during and after flooding'.
E3	Attend appropriate community meetings along with other Risk Management Authorities to maintain regular contact with communities and support actions to address issues raised.	LLFA	Community Groups	Ongoing	Support and attend community meetings as necessary. Use influence with external authorities to secure their assistance with community groups where appropriate.
E4	Improve awareness and adoption of property level resilience measures for residents.	LLFA	Community Groups	Ongoing	Assess what information is currently provided to residents and in what format. Evaluate the effectiveness of these

					practices and where necessary change and improve how that information is delivered.
E5	Ensure lines of communication from Risk Management Authorities to residents during flooding events are clear and efficient.	LLFA	Environment Agency Thames Water	Ongoing	Review how information on live flood events is delivered to residents and assess whether efficiencies or improvements could be made to this.
E6	Keep information on flood alleviation schemes up to date and accurate for residents. Use appropriate communication and engagement channels to inform residents about project completion and successes.	LLFA	Engagement Teams	Ongoing	Keep track of where information on flood management schemes is published and, when appropriate, update this.

APPENDIX B – STRATEGIC ENVIRONMENTAL ASSESSMENT

Strategic Environmental Assessment – Screening Assessment

APPENDIX C – HABITATS REGULATIONS ASSESSMENT

Habitats Regulations Assessment – Screening Assessment

APPENDIX D – LEGISLATION

The Local Flood Risk Management Strategy (LFRMS) sits within a wider legislative context at an international, national, regional and local level. The framework of legislation and policy provides organisations operating at different levels (international to local) with the applicable aims and targets for flood risk management.

International	
EU Water Framework Directive (2000)	The EU Water Framework Directive (WFD), published in 2000, makes it a requirement for Member States of the EU to improve and maintain the state of all waters, including surface waters and groundwater. All waters are to achieve a “good” ecological status by 2015 or, at the latest, by 2027. The WFD request that water management plans are developed using a river basin approach. The WFD was adopted into UK law in 2003 and will become part of new UK law following the UK’s departure from the European Union.
EU Floods Directive (2007)	The EU Floods Directive dictates how Member States should approach the flood risk management of all types of floods. A three-stage process was to be followed. For the initial cycle, by 2011 Member States had to produce Preliminary Flood Risk Assessments (PFRAs) to identify areas where water courses and coast lines are potentially at risk of flooding. By 2015, mapping of flood risk areas showing the extent, assets and number or inhabitants at risk were created. By 2015, Flood Risk Management Plans (FRMPs) for areas at high risk of flooding were produced, including measures to reduce flood risk. Updated FRMPs were produced for 2021-2027. The EU Flood Directive was implemented in UK law through the Flood Risk Regulations (FRR) (2009) and will be a continuing law following the UK’s departure from the EU. The cycle restarted in 2016 and Hillingdon’s LLFA have been involved in updates since.
IPCC Climate Change Report (2021)	The Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report aims to assess the physical science basis of climate change. The headlines from the 2021 report include predictions of +1.5°C temperature change in the next two decades and that climate change is presently affecting every populated region of the globe.
National	
Civil Contingencies Act (2004)	The Civil Contingencies Act is a legislative framework for civil protection in the UK that establishes the roles and responsibilities on organisations that play a role in preparing for and responding to emergencies. Under the Act, Local Authorities and the

	Environment Agency are Category 1 responders. Some of the Local Authority's duties include putting in place emergency plans, sharing and co-operating with other local responders to enhance efficiency.
The Pitt Review (2007)	Following the extreme flooding that took place in the summer of 2007 a comprehensive review led by Sir Michael Pitt, known as the Pitt Review, was commissioned by the UK Government. The Pitt Review provided 92 recommendations to improve flood risk management in England, notably that County Councils, large metropolitan boroughs, and Unitary Authorities should take the lead on the management of flood risk. The Pitt Review recommendations were accepted by the Government and initiated the creation of the FWMA.
Flood Risk Regulations (2009)	The FRR implements the EU Floods Directive in England. Flood risk management, as set out by the framework, requires the production of PFRAs, the identification of flood risk areas, mapping of such areas and FRMPs.
Flood and Water Management Act (2010)	The FWMA aims to provide better, more sustainable management of flood risk and coastal erosion along with improving the sustainability of water resources. The FWMA defines structures and responsibilities for managing flood risk, notably with the introduction of LLFAs which impart the role of managing local flood risk to County Councils, large metropolitan boroughs, and Unitary Authorities. The Environment Agency is appointed to hold the strategic overview role of all sources of flooding, in addition to managing the flood risk from main rivers and the sea. The FWMA also places a statutory duty on the Environment Agency to develop a NFCERMS for England, which all LFRMSs must align with.
Flood and Coastal Erosion Risk Management Policy (2020)	The FCERM Policy Statement reflects the government's long-term ambition to increase the resilience to flood and coastal erosion risk nationwide.
National Flood and Coastal Erosion Risk Management Strategy (2020) Flood and Coastal Erosion Risk Management Strategy Roadmap to 2026	The NFCERMS sets out a framework for RMAs involved in managing flood risk in order to increase the nation's flood resilience. The publication of the NFCERMS was followed by an initial 1-year action plan showing actions needed. In 2022 a roadmap was published containing longer-term, practical actions to 2026.
National Planning Policy Framework (2021, revised)	The National Planning Policy Framework (NPPF) sets out the planning policies to provide sustainable development and is published by the Department for Levelling Up, Housing and Communities (DLUHC). The NPPF provides guidance on developing

	<p>Local Plans in line with national planning policies. These policies include avoiding and managing risks from flooding, in line with the role of LPAs to prepare local plans and to decide on planning application permissions. The NPPF is supported by Planning Practice Guidance (PPG), including the Flood Risk and Coastal Change PPG, which is revised as necessary.</p>
<p>Environment Act (2021)</p>	<p>The Environment Act is the UK’s new framework of environmental protection since departing from the EU. It is intended to provide legal regulations on nature protection, water quality, clean air and other environmental protections. The Environment Act provides the Government with powers to set new binding targets, including for air quality, water, biodiversity, and waste reduction, and also establishes a new environmental watchdog – the Office for Environmental Protection.</p>
<p>Flood risk management plans (part a) 2021-2027</p>	<p>The flood risk management plans (FRMPs) (2021-2027) were published by the Environment Agency and split into two parts. Part A is the national overview and provides the context of FRMPs in strategic flood risk management planning, information on flood risk management at a national level and national measures lead by the Environment Agency and Lead Local Flood Authorities (LLFAs).</p>
<p>Environmental Improvement Plan (2023)</p>	<p>The Environmental Improvement Plan (EIP) is the first revision of the 25 Year Environment Plan (25YEP). The 25YEP was published by the UK government in 2018 and set out 10 goals to help the natural world: (1) clean air, (2) clean and plentiful water, (3) thriving plants and wildlife, (4) reducing the risks of harm from environmental hazards, (5) using resources from nature more sustainably and efficiently, (6) enhancing beauty, heritage and engagement with the natural environment, (7) mitigating and adapting to climate change, (8) minimising waste, (9) managing exposure to chemicals and (10) enhancing biosecurity. The EIP reinforces the 25YEP and sets out the plan to deliver the framework and vision previously set out.</p>
Regional	
<p>Mayor of London’s Climate Change Adaptation Strategy (2011)</p>	<p>This Mayor of London’s Climate Change Adaption Strategy sets out the framework for improving the quality of life in London and for protecting the natural environment. It provides an action plan for making London more sustainable by using three ‘pillars’: retrofitting London, greening London and cleaner air for London. The strategy presents the understanding of main climate change effects on London as well as analysing the effects on cross-sector issues including health, economy, and infrastructure. The strategy also provides a ‘roadmap to resilience’ outlining actions, with lead</p>

	and partner organisations. Since then, the Greater London Authority (GLA) have also produced a London Environment Strategy (2018) .
London Regional Flood Risk Appraisal (2018)	The London Regional Flood Risk Appraisal (RFRA) provides an overview of all sources of flooding in London and addresses both its probability and consequences. The evidence of the London RFRA subsequently informs the London Plan and should inform local-level flood risk assessments and local plans.
London Sustainable Drainage Action Plan (2021)	The London Sustainable Drainage Action Plan addresses a specific need to promote the awareness, and the retrofitting, of sustainable drainage systems right across London. It contains a series of actions to make London’s drainage system work in a more natural way with the main focus on the retrofitting of sustainable drainage to existing buildings, land and infrastructure. Sector-specific sustainable drainage (SuDS) guidance has been developed as part of the London Sustainable Drainage Action Plan.
The London Plan (2021)	The London Plan is a general Strategic Development Strategy for London. Producing a Strategic Development Strategy is a requirement of the London Mayor established under GLA legislation. The London Plan establishes an integrated economic, environmental, transport and social framework for the development of London for the next 20-25 years.
Thames River Basin District Flood Risk Management Plan (2021-2027)	The Thames River Basin District Flood Risk Management Plan (FRMP) is Part B of the FRMPs published by the Environment Agency in 2022. It provides information on flood risk for the Thames river basin district and a summary of the aims and actions required to manage the risk.
Thames river basin district River Basin Management Plan (2022)	The aim of river basin management plans is to enhance nature and the natural water assets. The Thames river basin district River Basin Management Plan (RBMP) describes the framework used to protect and improve the quality of waters in the Thames river basin and is used by RMAs for making water management decisions within the Thames river basin. It also includes the local environmental objectives that RMAs use to make planning decisions and an assessment of the current condition of each water body, including the reasons why, if not, it is not in good condition.
Thames Estuary 2100 (2023)	The Thames Estuary 2100 (TE2100) Plan was first published in 2012. It was developed by the Environment Agency and provides strategic direction for managing flood risk in the Thames Estuary to the end of the century. The TE2100 plan is an adaptive strategy and is reviewed on an interim basis every five years and on a full

	<p>basis every ten years. The new and updated version of the plan was published in 2023. The plan considers different long-term options for managing tidal flood risk depending on changes in factors which determine the level of flood risk, including sea level rise.</p>
Local	
<p>Surface Water Management Plan (2014)</p>	<p>A SWMP is a plan produced by LLFAs that presents the surface water flood risk for an area and forms a strategy on how to manage this with local partners. A SWMP considers flooding from sewers, drains, groundwater, and surface runoff from land, small watercourses and ditches that occur as a result of heavy and / or prolonged rainfall. The SWMP also includes a long-term action plan to manage surface water flood risk which will influence land-use planning, emergency planning and future developments. SWMPs also aim to identify SuDS opportunities to manage surface water flood risk which contributes towards the WFD requirements.</p>
<p>Strategic Flood Risk Assessment (2015)</p>	<p>A SFRA is required by the NPPF and provides a strategic overview of all forms of flood risk within a designated area. A SFRA assesses the risk from all sources of flooding, the cumulative effect that development or changing land use could have, and the effect of climate change on the risk of flooding. A SFRA should also identify opportunities to reduce the causes and effects of flooding, including potential areas of land for flood risk management infrastructure. The SFRA provides guidance for the Local Plan, individual planning applications, future flood management, emergency planning and how to adapt to climate change.</p>
<p>Local Plan (Part 1 (2012) and Part 2 (2020))</p>	<p>Hillingdon Council’s Local Plan sets out policy and guidance to manage growth and guide development within Hillingdon. It is split into two parts. The Local Plan Part 1 sets out the overall level and broad locations of growth up to 2026. Part 1 was adopted in 2012. The Local Plan Part 2 comprises Development Management Policies, Site Allocations and Designations and the Policies Map. Part 2 was adopted in 2020 and delivers the detail of the strategic policies set out in the Local Plan Part 1. It addresses needs and opportunities in relation to housing, the economy, community facilities and infrastructure, as well as conserving and enhancing the natural and historic environment, mitigating, and adapting to climate change and achieving well designed places.</p>



HILLINGDON
LONDON

Local Flood Risk Management Strategy

Strategic Environmental Assessment
Screening Report

REVISION HISTORY

Version	Date	Description	Prepared	Approved
1.0	October 2023	First full draft for client	CA	MM

EXECUTIVE SUMMARY

A Strategic Environmental Assessment (SEA) is required to be undertaken whenever a plan or programme is being implemented to ensure that the plan or programme poses no negative effects on the environment. This SEA serves to review whether implementing the actions associated with the proposed Local Flood Risk Management Strategy (LFRMS) could pose any likely significant effects on the environment. There are five stages of the SEA process, this document represents the Screening Report, which is the first stage. Through undertaking a Screening Report, it is possible to understand the potential risks to the local and wider environment that could be brought about by implementing the Strategic Objectives of the LFRMS and associated Action Plan. As a result, the outcome of this Screening Report can inform whether the LFRMS requires further investigation and progression of the SEA to the second stage.

The environmental, social and economic baseline data collated and reviewed as part of this process includes the following factors:

- Biodiversity, flora and fauna
- Infrastructure assets
- Population
- Public health
- Air quality
- Climate factors
- Soil and water
- Historic and cultural environments

By examining the existing policies and collating the baseline information for the London Borough of Hillingdon (Hillingdon), nine environmental and socio-economic issues have been identified. These issues may trigger potential impacts for the delivery of the actions associated with Hillingdon's LFRMS.

Based on the above factors, the following seven SEA Objectives have been created:

- **SEA Objective 1:** Promote sustainable development to ensure that new infrastructure does not contribute to increased environmental degradation.
- **SEA Objective 2:** Conserve and enhance local green spaces through tree planting and the implementation of sustainable drainage systems across Hillingdon to support habitat generation and biodiversity net gain.
- **SEA Objective 3:** Increase resilience of local populations to flooding and climate change, through improvements in education, so that residents understand how to report flooding and are empowered to take action to protect their properties from flooding.
- **SEA Objective 4:** Champion initiatives geared towards supporting vulnerable communities, improving awareness of who they can contact in relation to environmental matters.
- **SEA Objective 5:** Improve the WFD status of waterbodies within Hillingdon to ensure that water quality does not decline or pose harm to wildlife.
- **SEA Objective 6:** Protect cultural and historical assets from loss, decay or decline to minimise socio-economic damages.

To conclude the evaluation process, the SEA Objectives were assessed against the LFRMS Strategic Objectives to evaluate whether there would be negative, neutral or positive environmental, socio-

economic impacts posed by the implementation of the LFRMS. On the contrary, implementation of the LFRMS enables positive effects on the SEA Objectives in addition to some neutral effects. Therefore, this SEA Screening Report evidences that the proposed Strategic Objectives are not likely to pose negative impacts on the environmental and socio-economic issues identified and described within Hillingdon. As a result, it is not required to progress the LFRMS to the second stage of the SEA process.

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ACRONYMS AND ABBREVIATIONS

Abbreviation	Definition
AQAP	Air Quality Action Plan
EA	Environment Agency
FWMA	Flood and Water Management Act, 2010
GLA	Greater London Authority
HE	Historic England
Hillingdon	London Borough of Hillingdon
JHWS	Joint Health and Wellbeing Strategy
JSNA	Joint Strategic Needs Assessment
LFRMS	Local Flood Risk Management Strategy
LPA	Local Planning Authorities
NE	Natural England
NPPF	National Planning Policy Framework
RMA	Risk Management Authority
SEA	Strategic Environmental Assessment
SINCs	Sites of Importance for Nature Conservation
SSSIs	Sites of Special Scientific Interest
TfL	Transport for London
The Council	The administrative Council of London Borough of Hillingdon
TWUL	Thames Water Utilities Limited

1 INTRODUCTION

1.1 Purpose of screening

The purpose of a Strategic Environmental Assessment (SEA) is to identify, describe and evaluate the likely significant effects on the environment of implementing a proposed plan or strategy. In accordance with the [European SEA Directive \(2001\)](#) a SEA must be undertaken to review potential environmental issues and risks of applying actions associated with these prospective plans or programmes. Through this process, the SEA can identify whether alternative actions should be proposed to reduce any possible negative socio-economic or environmental impacts that may be identified. The Screening Stage (detailed in *Table 1-1*) is the first phase of the SEA process and if any negative effects are identified, progression to the second stage of the SEA process will be required.

This SEA Screening Report aims to review whether the implementation of the LFRMS and the measures from its associated Action Plan for the London Borough of Hillingdon (Hillingdon) could cause any negative impacts on the local and wider environment. The Strategic Objectives of the LFRMS will be assessed against the SEA Objectives, which will be based on local baseline data that identifies any environmental issues and problems. Subsequently, the results of this Screening Report will inform a decision on whether the LFRMS requires further investigation through undertaking a full SEA.

1.2 Methodology

The SEA process consists of five stages which are comprised of individual tasks that must be completed to meet the requirements of each stage. These five stages are presented in *Table 1-1*; this Screening Report is the output of the first stage (Stage A). Should the Screening Stage identify potential significant environmental impacts caused by implementing the LFRMS, a full SEA must be undertaken. Stage B would focus on evaluating the existing actions and proposing alternatives to mitigate negative effects in preparation for Stage C, which involves preparation of the Environmental Report. The penultimate Stage D includes consulting the draft Strategy and Environmental Report with the public and relevant consultation bodies. Finally, Stage E would involve evaluating and responding to the outcomes of this consultation, ensuring that any adverse effects are mitigated and then monitoring these effects in the future.

Table 1-1 Summary of SEA Stages

SEA Stages		SEA Task
Screening Stage	Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope.	A1: Identifying other relevant policies, plans and programmes and environmental protection objectives.
		A2: Collecting baseline information.
		A3: Identifying environmental issues and problems.
		A4: Developing the SEA Objectives and framework.
		A5: Consulting on the scope of the SEA.
Full Assessment Stage	Stage B: Developing and refining options and assessing affects.	B1: Testing the plan objectives against SEA Objectives.
		B2: Developing strategic alternatives.
		B3: Predicting the effects of the plan, including alternatives.
		B4: Evaluating the effects of the plan, including alternatives.
		B5: Mitigating adverse effects.
	Stage C: Preparing the environmental report.	C1: Preparing the environmental report.
	Stage D: Consulting on the draft strategy and the SEA report.	D1: Consulting on the draft strategy and environmental report with the public and consultation bodies.
		D2: Assessing significant changes.
		D3: Making decisions and providing information.
	Stage E: Monitoring the significant effects of implementing the strategy.	E1: Developing aims and methods for monitoring.
		E2: responding to adverse effects.

1.3 Consultation process

It is required that this SEA Screening Report undergoes a statutory consultation process involving three statutory consultees: the Environment Agency (EA), Natural England (NE) and Historic England (HE). The EA, NE and HE will review and provide feedback on the scope and results of this SEA Screening Report during a six-week period from December 2023 to January 2024. As part of this process, the statutory consultees will have sight of the consultation questions within this SEA Screening Report, which are detailed in *Section 1.4*. Any feedback provided will be integrated into an updated version of this document. Following this, a public consultation will be undertaken during a six-week period from January to February 2024, during which members of the public, internal stakeholders and strategic stakeholders

will be able to provide comment on this SEA Screening Report. Similarly, suggested amendments will be reviewed and incorporated into the final version prior to finalisation of this document.

1.4 SEA consultation questions

In line with *Section 1.3*, those consulted on this SEA Screening Report will be asked specific questions to ensure that this Screening Assessment satisfies the SEA requirements. The below 14 questions correspond to the five Tasks within Stage A of the SEA process, as presented in *Table 1-1*.

Task A1: Legislation, plan, and policies:

1. Do you feel we have included all relevant policies, documents, plans and legislation that relate to or could affect the LFRMS?
2. If not, which additional documentation should be taken into consideration?

Task A2: Baseline data:

3. Do you agree that the baseline data that we have included herein are appropriate to the LFRMS that is being developed? If you do not agree, please explain why.
4. Do you have, or know of, any additional baseline indicators or data that should be added into this SEA Screening Report? If so, please provide any appropriate links and/or documents.
5. As far as you are aware, is the baseline data correct? If not, please provide any appropriate links and/or documents with correct data.

Task A3: Environmental issues affecting Hillingdon:

6. Do you agree that these are the main environmental issues relating to the LFRMS affecting Hillingdon? If not, which main issues do you believe should be included?
7. Are there any other environmental issues that you believe should be added into this SEA Screening Report? If so, please provide details.
8. Do you believe that any of these environmental issues do not affect Hillingdon? If so, please provide details.

Task A4: Proposed SEA Objectives:

9. Do you agree that these proposed SEA Objectives are suitable in the context of Hillingdon? If not, which Objectives are unsuitable and why?
10. Are there any other SEA Objectives that you believe should be included? If so, please provide details.

Task A5: Screening analysis:

11. Do you have any comments on the proposed method for assessing the SEA Objectives against the LFRMS Strategic Objectives?
12. Do you agree with the screening analysis of each of the LFRMS Strategic Objectives? If not, please provide reasons as to why you would screen a certain Objective differently.

Conclusion and further comments:

13. Do you have any comments on the conclusions within this SEA Screening Report of the LFRMS?
14. Do you have any additional comments or suggestions for this SEA Screening Report?

1.5 Summary of Local Flood Risk Management Strategy

The [Flood and Water Management Act 2010 \(FWMA\)](#) brought about the role of the Lead Local Flood Authority (LLFA), which is the unitary authority or county council. Hillingdon undertakes the role of the LLFA and, under Section 9 of the FWMA, is responsible for developing, maintaining, applying and monitoring a strategy for local flood risk management in its area. The purpose of a LFRMS is to assess local flood risks, set out the roles and responsibilities of relevant risk management authorities (RMAs) and develop Strategic Objectives to manage local flood risk. A LFRMS should be updated every six years, or as and when there are any changes to policy or legislation. The three documents associated with the LFRMS include the detailed Action Plan which sets out measures to achieve the Strategic Objectives, a Habitats Regulations Assessment Screening Report and this SEA Screening Report.

Five Strategic Objectives have been identified in alignment with the EA's National Flood and Coastal Erosion Risk Management Strategy and local Council priorities:

Figure 1-1 LFRMS Strategic Objectives



2 IDENTIFICATION OF RELEVANT POLICIES

2.1 Task A1 summary

The purpose of Task A1 is to identify relevant policies, plans and programmes and environmental protection objectives, in line with *Table 1-1*. Task A1 is completed by compiling a list of relevant policies, documents and legislation that could affect the actions of the LFRMS in relation to its Strategic Objectives (which are detailed in *Figure 1-1* LFRMS Strategic Objectives).

2.2 Relevant policies

Table 2-1 presents all relevant policies, strategies and action plans that have been considered at an international, national, regional and local level as being significant to the implementation of the LFRMS.

Table 2-1 Policies, Strategies and Action Plans relevant to the SEA process

International
UNESCO World Heritage Convention (1972)
Convention for the Protection of the Architectural Heritage of Europe (1985)
EU Habitats Directive (1992)
The Valletta Treaty (formally European Convention on the Protection of Archaeological Heritage) (1992)
EU Water Framework Directive (2000)
European Landscape Convention (2000)
European SEA Directive (2001)
EU Floods Directive (2007)
EU Birds Directive (2009)
EU Biodiversity Strategy for 2030 (2020)
National
Ancient Monuments & Archaeological Areas Act (1979)
Wildlife and Countryside Act (1981)
Environmental Protection Act (1990)
Planning (Listed Buildings & Conservation Areas) Act (1990)
Land Drainage Act (1991)
The UK Biodiversity Action Plan (1994)
Civil Contingencies Act (2004)
Natural Environment and Rural Communities Act (2006)
The Pitt Review - Lessons learned from the 2007 summer floods (2007)
The SuDS Manual C753F (2015)
Climate Change Act (2008)
Future Water: The Government's Water Strategy for England (2008)
Flood Risk Regulations (2009)
Flood and Water Management Act (2010)
Biodiversity 2020: A strategy for England's wildlife and ecosystem services (2011)
National Standards for Sustainable Drainage Systems (2011)
Water Act (2014)
Environmental Permitting Regulations (2016)

DEFRA: 25 Year Environment Plan (2018)
National Flood and Coastal Erosion Risk Management (FCERM) Strategy for England (2020)
Meeting our Future Water Needs: A National Framework for Water Resources (2020)
Environment Act (2021)
National Planning Policy Framework (2012, revised 2021)
National Planning Practice Guidance (2016, revised 2022)
Regional
Thames Catchment Flood Risk Management Plan (2009)
Mayor of London's Climate Change Adaptation Strategy (2011)
Thames Estuary 2100 Flood Risk Management Plan (2012)
Thames River Basin District, River Basin Management Plan (2015)
GLA: Review of Metropolitan SINC's (2016)
London Regional Flood Risk Appraisal (2018)
London Environment Strategy (2018)
West London Strategic Flood Risk Assessment (2018)
Zero carbon London: A 1.5°C compatible plan (2018)
The London Plan (2021)
Thames Estuary 2100: 10-Year Review (2022)
Thames Estuary 2100 Plan (2023)
Local
Hillingdon's Preliminary Flood Risk Assessment (2011) (Addendum 2017)
Hillingdon's Air Quality Action Plan (2019-2024)
Hillingdon's Local Plan: Part 1 – Strategic Policies (2012-2026)
Hillingdon's Local Plan: Part 2 – Site Allocations and Designations (2020-2026)
Hillingdon's Strategic Climate Action Plan (2021)
Hillingdon's Catchment Plan (2022)
Hillingdon's Joint Strategic Needs Assessment (2022)
Hillingdon's Joint Health and Wellbeing Strategy (2022-2025)
Hillingdon's Tree Strategy (2023)
Hillingdon's Climate Change Declaration (2030)

2.3 Task A1 consultation questions

1. Do you feel we have included all relevant policies, documents, plans and legislation that relate to or could affect the LFRMS?
2. If not, which additional documentation should be taken into consideration?

3 BASELINE INFORMATION

3.1 Task A2 summary

The purpose of Task A2 is to collate baseline data about Hillingdon's socio-economic and environmental indicators, in line with *Table 1-1*. This includes information regarding Hillingdon's:

- Biodiversity, flora and fauna
- Infrastructure assets
- Population
- Public health
- Air quality
- Climate factors
- Soil and water
- Historical and cultural environment

This information is presented in *Section 3.3* and has been collated from a range of sources. The information will then be used to establish any existing environmental issues within Hillingdon. Though the SEA predominantly focuses on identifying and evaluating environmental effects, additional social and economic baseline indicators have been included to broaden the scope of any potential impacts of the actions outlined in the LFRMS.

3.2 Hillingdon borough characteristics

Hillingdon is located in north-west London and is the second largest of London's 33 boroughs, sharing its borders with Berkshire, Buckinghamshire, Ealing, Harrow, Hertfordshire, Hounslow and Surrey. Over half of the borough's 42 square miles is comprised of countryside land, including watercourses, parks and woodland. Heathrow (Europe's busiest Airport) is located in Hillingdon and Terminal 5 is the largest free-standing building in the UK.

Major settlements in Hillingdon include Northwood, Harefield, Ruislip, Uxbridge, Hayes and West Drayton. There are 21 wards within Hillingdon and the borough is predominantly rural with natural surfaces and inland water in the north and largely manmade surfacing in the south. Hillingdon has been awarded over 60 Green Flag Awards for their parks and open spaces, such as Ruislip Woods and Stockley Country Park.

Hillingdon is well-connected by highway, London Underground, train, air and buses. The primary highway transport links within Hillingdon include the M4 and M25 motorways, the A4, A40, A30, A312, A4180 and A3113 main roads. Hillingdon is served by the Central, Metropolitan and Piccadilly Lines operated by Transport for London (TfL). Great Western Railway operate at Hayes and Harlington and West Drayton Stations; Chiltern Railways run via South Ruislip, West Ruislip and Heathrow Airport, which has a network of over 350 destinations worldwide and is also served by the Heathrow Express. Buses operate from within and outside London, primarily into Uxbridge Town Centre and Heathrow Airport.

3.3 Baseline information

3.3.1 Biodiversity, flora and fauna

As defined in the [UK Biodiversity Action Plan \(1994\)](#), biodiversity is the variety of life forms that surround us and incorporates a wide variety of flora and fauna. The [EU Biodiversity Strategy for](#)

[2030 \(2020\)](#) identifies that during the past four decades, global wildlife populations declined by 60% as a result of human activity; biodiversity loss is one of the biggest threats facing humanity in the current decade.

Hillingdon is one of the most biodiverse boroughs in London and has a mosaic of habitats, such as trees, grasslands, wetlands and parklands, which are home to a variety of common and protected species. According to [Hillingdon's Local Plan: Part 1 – Strategic Policies \(2012-2026\)](#), Hillingdon contains over 5,000 acres of open countryside, including 4,970 hectares of Green Belt, 200 parks and open spaces, over 11,500 species of habitats and more than 8,000 individual trees protected by Tree Protection Orders. Approximately 7% of Hillingdon is comprised of Conservation Areas.

The Local Plan identifies several challenges to biodiversity, predominantly relating to development pressures, with direct competition of land between wildlife habitats and increasing urban population in addition to climate change. In accordance with the [National Planning Policy Framework \(2012, revised 2021\)](#) (NPPF), Local Planning Authorities (LPAs) should aim to conserve and enhance biodiversity, including by refusing developments that reduce or damage irreplaceable habitat spaces. [Hillingdon's Strategic Climate Action Plan \(2021\)](#) details Hillingdon's Climate Commitment to enhance opportunities for biodiversity particularly in urban areas. A key way to achieve biodiversity is through encouraging wildflower growth and increasing tree planting. [Hillingdon's Tree Strategy \(2023\)](#) establishes the importance of Hillingdon's trees, the benefits of which should be appreciated at various stages of their life cycle for the provision of different habitats and other benefits to wildlife. COVID-19 demonstrated the importance of local green spaces for both physical and mental health and the Council's progress in deploying green infrastructure will contribute to wellbeing improvements while cooling urban areas and increasing biodiversity across Hillingdon.

It is necessary to designate areas of natural importance because many sites encompass ecologically important habitats that increase biodiversity value. Therefore, these should be protected to enable habitat generation and biodiversity enhancements. *Table 3-1* lists the designated sites of natural importance within Hillingdon. For example, the [Greater London Authority's \(GLA\) Review of Metropolitan SINC's \(2016\)](#) identifies Little Britain as a SINC with a large range of species, including Unbranched Bur-Reed (*Sparganium Emersum*) and Water Dock (*Rumex Hydrolapathum*). The floodplain grassland is of key significance; originally used as gravel pits and now supports a variety of flora and fauna, such as the Sharp-Flowered Rush (*Juncus Acutiflorus*) and protected water voles and otters, in addition to bats, which are present in good numbers.

Table 3-1 Designated sites of natural importance within Hillingdon

Designation	No. of Sites	Site Names
Local Nature Reserves (LNRs) Source: NE LNR dataset	9	Cranebank Frays Valley Stockers Lane Islip Manor Ruislip Yeading Woods Yeading Brook Meadows Denham Quarry Park Denham Country Park
National Nature Reserve (NNRs) Source: Hillingdon's Local Plan: Part 1 – Strategic Policies (2012-2026)	1	Ruislip Woods
Regionally Important Geological and Geomorphological Site (RIGS) Source: Hillingdon's Local Plan: Part 1 – Strategic Policies (2012-2026)	1	Gravel Pits, Harefield
Sites of Importance for Nature Conservation (SINCs) Source: Hillingdon's Local Plan: Part 1 – Strategic Policies (2012-2026)	64	14 Sites of Metropolitan Grade Importance 15 Sites of Borough Grade I Importance 25 Sites of Borough Grade II Importance 7 Sites of Local Importance 3 Sites of Countryside Conservation Area
Sites of Special Scientific Interest (SSSIs) Source: NE SSSI dataset	6	Ruislip Woods Harefield Pit Frays Farm Meadow Mid Colne Valley Old Park Wood Denham Lock Wood

3.3.2 Infrastructure assets

The Council has a variety of critical infrastructure assets which are vulnerable to flooding and thus must be considered when preparing plans, strategies or programmes to confirm that the document implementation will not negatively impact upon flood risk. *Table 3-2* details a list of infrastructure assets located in Hillingdon, which has been collated through review of [Hillingdon's Strategic Infrastructure Plan \(2017\)](#) and [Hillingdon's Local Plan: Part 1 – Strategic Policies \(2012-2026\)](#) in conjunction with [Annex 3 of the NPPF](#) and the [Council's webpages](#).

Table 3-2 Designated infrastructure assets within Hillingdon

Level of Infrastructure	Number of Assets	Types of Infrastructure
Essential infrastructure assets	30	One electricity substation; one airport; eight A-Roads and two motorways; five National Rail train stations; 13 London Underground tube stations.
Highly vulnerable infrastructure assets	20	12 emergency service stations (comprised of five police stations, three ambulance stations, and four fire stations); one traveller site (Colne Park, West Drayton); seven telephone exchanges.
More vulnerable infrastructure assets	203	Three hospitals; 94 educational establishments (65 primary schools, 18 secondary schools, six special schools, one nursery and two pupil referral units, one college [Harrow, Richmond & Uxbridge Colleges] and one university [Brunel University]); two waste and recycling centres; 87 places of worship; 17 public libraries.

There are currently 99,800 households residing in Hillingdon as reported in the Council’s Local Plan and a total of 6,375 new homes are proposed in accordance with [Hillingdon’s Local Plan: Part 2 – Site Allocations and Designations \(2020-2026\)](#). Further, [Hillingdon’s Local Plan: Part 1 – Strategic Policies \(2012-2026\)](#) identifies that approximately 7,000 properties (6%) are in areas of flood risk. Large parts of Hillingdon sit above a Principal Aquifer and the borough is a major producer of minerals compared to other London Boroughs. Table 3-3 presents the number of properties at risk of surface water flooding during the 1 in 30-year, 1 in 100-year and 1 in 1,000-year rainfall events across Hillingdon. This data was produced by the EA in 2014 and more information regarding the Council’s flood risk and management procedures can be found in [Hillingdon’s Catchment Plan](#).

Table 3-3 Properties at risk of flooding from surface water in Hillingdon (EA data, 2021)

Return Period	Residential	Commercial	Other	Total
1 in 30-year rainfall event	2,155	454	702	3,311
1 in 100-year rainfall event	5,357	1,082	1,421	7,860
1 in 1000-year rainfall event	18,999	3,076	4,906	26,981

3.3.3 Population

As of 2012, according to [Hillingdon’s Local Plan: Part 1 – Strategic Policies \(2012-2026\)](#), the population of Hillingdon was approximately 260,000 and was expected to grow by 14% by 2026. However, [Hillingdon’s Joint Strategic Needs Assessment \(2022\)](#) (JSNA) states that the population of Hillingdon by 2020 was already 309,000; therefore, by 2020, Hillingdon’s population had already grown by 84% when comparing to 2012 statistics. For comparison purposes, [ONS Census Data \(2021\)](#) indicates that Hillingdon’s population has a significantly higher growth rate when comparing to the 7% national increase between 2011 to 2021 and to Kensington and Chelsea’s 10% population reduction during this timeframe.

The Council’s Local Plan notes that Hillingdon’s population is comprised of approximately 20% of under 16-year-olds, which is expected to remain relatively constant until 2026 and 15% of over 65-

year-olds, which is set to increase to approximately 8% of Hillingdon's population by 2026. [Hillingdon's JSNA](#) states that the Council's population is younger when comparing to the national average and that there were approximately 3,000 more males (156,000) than females (153,000) in 2020. The number of people aged 25 to 29 decreased from 2018 to 2020 and individuals aged 40 to 44 increased from 2018 to 2019.

Furthermore, the JSNA demonstrates that homelessness is worse in Hillingdon than the national average and when compared to London-wide rates between 2019 and 2020. The number of children residing in low-income families is increasing and this is particularly evident in Yeading and Townfield. To mitigate this, the Council seeks to provide 35% of all new housing provision as affordable housing as stipulated in [Hillingdon's Local Plan: Part 1 – Strategic Policies \(2012-2026\)](#).

3.3.4 Public health

Hillingdon's population is diverse and individuals are living longer lives. The Council's [JSNA \(2022\)](#) identifies that Hillingdon includes both affluent areas (in the top 20% in the country) and areas of deprivation (in the lowest 20% in the country). Average life expectancy for men and women is greater than the national average and is comparable to the average for London. Women in Hillingdon have a higher average life expectancy at 84 years while the life expectancy for men is 80.4 years. The [JSNA](#) evidences that, as of 2020, the main cause of death within Hillingdon was cancer and circulatory diseases (23% of deaths can be attributed to these causes), COVID-19 (which claimed the lives of 373 people) and respiratory diseases. NO₂ levels caused by road traffic continue to exceed recommended levels; therefore, poor air quality increases the likelihood of acute asthma and Chronic Pulmonary Disease, in addition to heart disease and cancer. The onset of dementia is predicted to increase by approximately 0.3% in 2024/2025 and the rate of mortality of individuals with dementia in people over the age of 65 is 803 per 100,000 people; this is comparable to the London-wide rate which is 723 per 100,000.

The Council has a range of facilities geared towards providing public healthcare, such as 45 GP practices and a single provider for mental and physical health. [Hillingdon's Joint Health and Wellbeing Strategy \(2022-2025\)](#) (JHWS) details the steps the Council is taking to reduce risk to public health. The [JHWS \(2022-2025\)](#) is centred on six Council priorities, including supporting the young to live healthier lives; tackling unfair inequalities in health and disparities in access to services; helping prevent the onset of chronic conditions, such as dementia; supporting individuals to live well for longer; improving mental health services and improving ways the Council works within and across organisations to improve health and social care. Respective actions include reducing the levels of child obesity by implementing a Child Healthy Weight Plan; expanding support for those with learning difficulties; working to reduce diabetes while promoting a healthy lifestyle; identifying vulnerable people who may be at risk of age-related diseases; providing timely responses to crises, working with GPs and monitoring healthcare staff retention.

3.3.5 Air quality

Air pollution is defined by the [GLA's Demystifying Air Pollution in London Report](#) as the presence of materials or substances in the air that have harmful impacts on health. It is recognised that air pollution reduces life expectancy for thousands of people annually; the GLA identified that approximately 9,400 premature deaths arise from exposure to particulate matter (PM) and nitrogen dioxide (NO₂) in London alone. PM and NO₂ are often viewed as the most dangerous forms of air pollution due to their high concentrations and the negative health implications. [Hillingdon's](#)

[IHWS \(2022-2025\)](#) recognises respiratory disease as the third highest cause of death in Hillingdon. Managing its air quality is therefore a priority within Hillingdon, especially considering that the borough is home to Heathrow – Europe’s busiest airport.

[Hillingdon’s Air Quality Action Plan \(2019-2024\)](#) (AQAP) details the sources of pollution within Hillingdon, maps the areas of focus, outlines key actions assigned to relevant RMAs and lists the Council’s priorities for managing air quality over the six-year period. Mapping within the [AQAP](#) indicates that Hillingdon are meeting their current objectives for PM₁₀ and PM_{2.5}; however, the annual mean NO₂ levels in 2013 exceeded the limit values, a situation that persists to the present day. The key contributors to the levels of NO₂, PM₁₀ and PM_{2.5} are attributed to the major highway network and Heathrow, which generates around 50% of the NOx emissions within Hillingdon. The GLA in partnership with TfL produced the [London Atmospheric Emissions Inventory \(2019 Air Quality Focus Areas\)](#), which included mapping Focus Areas described as areas where the risk of exceeding pollution limits is high and there is broad public exposure. 12 Focus Areas were identified, which include:

- Stretch of the M4 north of Heathrow
- Hayes Town Botwell Lane/Pump Lane
- Hayes North Hyde Road
- A40/Swakeleys Road
- A40/South Ruislip
- Ossie Garvin to Southall Park
- West Drayton/Yiewsley
- A40/Long Lane
- Uxbridge Town Centre
- Uxbridge Road Corridor
- Ruislip Town Centre
- Heathrow Area

Hillingdon’s [AQAP](#) acknowledges that the Council currently holds Cleaner Air Borough status, which was awarded by the GLA in recognition of the actions the Council and partner RMAs have taken to improve its air quality. There are further opportunities for air quality improvements across Hillingdon, such as increasing the number of Electric Vehicle charging points and a proposal for the first north-south bus route from Hillingdon to Ruislip. Progress is recognised through the recent addition of the Elizabeth Line to encourage public transport usage across Hillingdon and to wider reaches in and outside of London.

The Council will prioritise improving air quality around schools, promote the use of greener walking and cycling infrastructure and raise public awareness via targeted campaigns, for example encouraging alternatives to car travel. Hillingdon are committed to press Heathrow Airport to reduce their emissions as quickly as possible and remain firmly opposed to airport expansion, or any changes to operation which will increase emissions. Collaboration with external stakeholders combined with the lobbying of central and regional governments will be essential to minimise the risk of air pollution and improve air quality within Hillingdon.

3.3.6 Climate factors

The [IPCC Climate Change 2023 Synthesis Report](#) states that global temperatures are predicted to rise by 1.5°C within the 21st century due to human activity via emission of greenhouse gases. As a result, heavy rainfall events are projected to intensify and become more frequent, which is likely to increase local flooding. The latest [State of the UK Climate Report](#) confirms that the UK has become wetter over the past few decades. [Hillingdon’s Local Plan: Part 1 – Strategic Policies \(2012-2026\)](#) notes that Hillingdon has the fourth highest carbon emissions of all London Boroughs.

432,000 tonnes can be attributed to transport within Hillingdon (though this figure excludes the aviation fuel and motorway travel), 560,000 tonnes of CO₂ is associated with domestic fuel and 1,000,000 tonnes of CO₂ from industrial processes. On average, eight tonnes of carbon dioxide (CO₂) are emitted per person across Hillingdon.

[Hillingdon's Strategic Climate Action Plan \(2021\)](#) details the Council's vision to become the greenest London Borough by achieving carbon neutral status and 100% clean electricity by 2030. A fundamental way to accomplish this is through planting more trees. The Council's [Tree Strategy \(2023\)](#) notes that increasing tree cover can reduce the urban heat island effect by providing shade, deflecting solar radiation and releasing moisture into the atmosphere. Trees can also absorb and store CO₂ which helps to combat the effects of climate change. The Council acknowledges in its [Climate Change Declaration \(2023\)](#) the clear evidence that global warming levels should be limited to 1.5°C in accordance with the IPCC Report. This Declaration recognises progress Hillingdon has made to date, citing a 54% reduction in CO₂ emissions since 2018 from non-domestic electricity and gas supplies, the provision of drinking fountains across Hillingdon to reduce single use plastic and urban greening initiatives, including offering 5,000 free saplings for local residents to grow.

[Hillingdon's Local Plan: Part 2 – Site Allocations and Designations \(2020-2026\)](#) notes that Heathrow Airport is a major source of Hillingdon's emissions and therefore, the growth of housing and employment should be carefully managed, so as not to cause damaging impacts to climate change initiatives. [Heathrow's Net Zero Plan \(2022\)](#) is centred on achieving up to 15% reduction in carbon from aviation and at least a 45% decline in carbon from surface access, supply chain, vehicles and infrastructure. Two fundamental actions Heathrow are taking to accomplish these goals include switching to low carbon sustainable aviation fuel, which is contributing up to 7% of the 2030 goal and by continuing research and development to bring net zero carbon aircraft into service. [Heathrow's Climate Change Adaptation Report \(2022\)](#) summarises the Airport's longer-term commitments, which include improving data sharing between transport and energy sectors, integrating green infrastructure, including sustainable urban drainage systems, into developments and ongoing asset maintenance to identify issues in enough time to act.

3.3.7 Soil and water

The geology of Hillingdon is comprised of various Superficial Deposits, including Taplow Gravel Formation and Langley Silt Member to the south and Lynch Hill Gravel Member to the north. Hillingdon is predominantly underlain by London Clay Formation bedrock geology, is situated in the Thames Estuary and has an average elevation of 46m AOD. The southern region encompassing Heathrow Airport is the flattest locality, with a 4m AOD minimum elevation, while the maximum elevation is approximately 150m AOD in the north.

Several rivers run through Hillingdon, including the Colne, Frays, Pinn, Wraysbury and the Yeading Brook, in addition to approximately 20km of the Grand Union Canal. The River Colne is 36 miles long and forms the boundary between Buckinghamshire and Hillingdon, joining the River Thames at Staines-upon-Thames, south of Hillingdon. Frays River is a semi-canalised short river (5.5 miles) that branches off the River Colne in Buckinghamshire; is joined on its east bank by the River Pinn and then re-joins the River Colne at Drayton Point. The River Pinn is an ancient rivulet, approximately 12 miles long, which flows in a southerly direction, joining Frays River at Yiewsley. Wraysbury River is an anabranch of the River Colne, measuring approximately 6km in length. The River runs parallel with the M25 towards the Wraysbury Reservoir and re-joins the River Colne in Staines shortly before its confluence with the River Thames. The Yeading Brook is a 16-mile

tributary of the River Crane; its source is on the east side of Pinner Park where it flows southeast into the only surviving filled moat in Middlesex at Headstone Manor. The Brook is culverted beneath housing for half a mile and ultimately becomes the River Crane at Cranford, Hounslow.

The [EU Water Framework Directive \(2000\)](#) (WFD) focuses on ensuring good qualitative and quantitative health of the water environment. *Table 3-4* details the rivers that have been identified as situated in Hillingdon in accordance with the WFD and their respective hydrogeomorphological designation (modification status), ecological status and physico-chemical quality. According to EA data, all of the identified rivers are heavily modified, with moderate ecological status and physico-chemical quality.

Table 3-4 WFD waterbodies located in Hillingdon

<u>Waterbody Name</u>	<u>Waterbody ID</u>	<u>Hydromorphological Designation</u>	<u>Ecological Status</u>	<u>Physico-Chemical Quality</u>
River Colne (Confluence with Chess to River Thames)	GB106039023090	Heavily modified	Moderate	Moderate
Colne Brook	GB106039023010	Heavily modified	Moderate	Moderate
River Pinn	GB106039023070	Heavily modified	Moderate	Moderate
Yeading Brook	GB106039023051	Heavily modified	Moderate	Moderate

3.3.8 Historical and cultural environment

Hillingdon is a suburban borough that was an ancient parish in Middlesex. The borough was created in 1965 through the merging of the previous Borough of Uxbridge including the urban districts of Hayes and Harlington, Ruislip-Northwood and Yiewsley and West Drayton. [Hillingdon's Local Plan: Part 1 – Strategic Policies \(2012-2026\)](#) details the borough's historical and cultural assets, which are mapped in [Hillingdon's Heritage Asset Map \(2020\)](#). These architectural and archaeological heritage sites are recognised in [HE's at Risk Register \(2020\)](#), which notes the designation, condition and occupancy of the sites. *Table 3-5* provides a list of these sites, their classification¹ and notable examples of infrastructure.

Table 3-5 Historical and cultural assets within Hillingdon

<u>Type of Classification</u>	<u>Number of Assets</u>	<u>Examples of Infrastructure</u>
Listed buildings (Grade I, II, or II*) From HE Heritage at Risk Register (2020)	0 (I) 26 (II) 4 (II*)	Granaries at Knightscode Farm, Harefield; Enterprise House, Hayes; Mount Vernon Hospital, Northwood and Church of St John, Royal Lane

¹ [HE Listed Buildings](#) defines the following Listed Building classifications:

Grade I buildings are of exceptional interest (only 2.5% of listed buildings are in this class)

Grade II* buildings are important buildings of more than special interest (5.8% of listed buildings are in this class)

Grade II buildings are of special interest (91.7% of all listed buildings are in this class)

Type of Classification	Number of Assets	Examples of Infrastructure
Registered parks and gardens <i>From Hillingdon's Heritage Asset Map (2020)</i>	2	Stockley Park: Business Park Phases I and II, & Country Park & Golf Course and Harefield Place Registered Park and Garden
Scheduled ancient monuments <i>From Hillingdon's Heritage Asset Map (2020)</i>	5	Ickenham Manor Farm; Park Pale; Brackenbury Farm Moated Site
Areas of Special Local Character <i>From Hillingdon's Heritage Asset Map (2020)</i>	14	Hillside, Northwood Hills; Copsewood Estate, Northwood; North Uxbridge; Hillingdon Court Park
Conservation areas <i>From Local Plan: Part 1 – Strategic Policies (2012-2026)</i>	30	Cowley Lock; Eastcote Village; Springwell Lock; Cranford Park
Archaeological Priority Areas (APAs) <i>From Hillingdon's Heritage Asset Map (2020)</i>	9	Heathrow APZ; Colne Valley; Ruislip Motte & Bailey

3.4 Task A2 consultation questions

3. Do you agree that the baseline data that we have included herein are appropriate to the LFRMS that is being developed? If you do not agree, please explain why.
4. Do you have, or know of, any additional baseline indicators or data that should be added into this SEA Screening Report? If so, please provide any appropriate links and/or documents.
5. As far as you are aware, is the baseline data correct? If not, please provide any appropriate links and/or documents with correct data.

4 IDENTIFICATION OF ENVIRONMENTAL ISSUES

4.1 Task A3 summary

The purpose of Task A3 is to identify the environmental issues that Hillingdon face and that could be further impeded through implementing the actions from the LFRMS, in line with *Table 1-1*. These key environmental issues have been identified by examining the policies listed during Task A1 and then analysing the baseline information collated during Task A2. *Table 4-1* presents these issues.

4.2 Local environmental issues

After assessment of the relevant policies listed in *Section 2.2* and evaluation of the baseline information in *Section 2.3*, the following environmental and social issues have been identified and summarised in *Table 4-1 Environmental issues, potential problems and related LFRMS Objectives*, which details the issue, the potential associated problems and the relevant LFRMS Strategic Objective that comprises actions to resolve or improve the issue.

Table 4-1 Environmental issues, potential problems and related LFRMS Objectives

Environmental/Social Issues	Potential Associated Problems	Proposed LFRMS Objective
Development pressures causing a decline in biodiversity	<ul style="list-style-type: none"> Loss of protected species Decrease in natural green spaces and conservation areas Reduction in mental and physical health benefits associated with access to open spaces Urban heat island effect, increasing energy prices Decline in amenity value Rise in CO₂ across Hillingdon that would usually be stored in woodland and other flora Increase in flooding incidents by reducing natural drainage 	A C D
Increasing amount of infrastructure at risk of flooding	<ul style="list-style-type: none"> More residents and businesses at risk of flooding Increased insurance premiums and cost of property repairs Greater risk for elderly, isolated and vulnerable populations Disruption to Hillingdon's transport network, including TfL's red routes, the motorway network, rail travel and Heathrow Airport operations Increase in pressure on Hillingdon's emergency services Increased LLFA funding required for Section 19 flood investigations 	A B C D E
Rapid population increase	<ul style="list-style-type: none"> Increased populaces at risk of flooding Greater demand for housing, pushing up rental and purchase prices Rise in homelessness and inequality Higher crime rates More pressure on existing healthcare facilities and services 	A C D
Ageing population	<ul style="list-style-type: none"> Increased elderly, vulnerable residents at risk of flooding Pressure on the NHS, ambulance and hospital staffing Greater risk of loneliness and social isolation Higher levels of age-related illnesses. 	B E
Increasing NO ₂ , PM _{2.5} and PM ₁₀ levels	<ul style="list-style-type: none"> Decrease in air quality across Hillingdon 	B D

Environmental/Social Issues	Potential Associated Problems	Proposed LFRMS Objective
	<ul style="list-style-type: none"> • Increase in acute asthma and Chronic Pulmonary Disease, in addition to heart disease and cancer • Greater mortality rates • Decline in life expectancy • Inequalities in access to clean air across Hillingdon • Pressure on health and wellbeing services 	E
Increasing CO ₂ emissions	<ul style="list-style-type: none"> • Contribution to local and global climate change • Increase in frequency and severity of storms • Rise in precipitation and surface water, flash flooding • Greater vulnerability to flooding as more areas are at risk 	A C
Reduction in quality of existing waterbodies	<ul style="list-style-type: none"> • Decline in water quality • Reduced physico-chemical quality of waterbodies • Poorer ecological status of waterbodies • Decline in fish species and subsequent effects on local fauna 	B C D
Decline, decay, neglect of historical and cultural heritage assets	<ul style="list-style-type: none"> • Reduced value of local spaces • Loss of recreation for local residents • Exacerbated loss through increased flooding related to climate change • Loss of historical and culturally significant infrastructure • Reduction in local tourism geared around history and culture 	A B C D E

4.3 Task A3 consultation questions

6. Do you agree that these are the main environmental issues relating to the LFRMS affecting Hillingdon? If not, which main issues do you believe should be included?
7. Are there any other environmental issues that you believe should be added into this SEA Screening Report? If so, please provide details.
8. Do you believe that any of these environmental issues do not affect Hillingdon? If so, please provide details.

5 SEA OBJECTIVES

5.1 Task A4 summary

The purpose of Task A4 is to develop the SEA Objectives and framework, in line with *Table 1-1*. Through identifying the environmental issues presented in *Section 4.2*, seven SEA Objectives have been developed. The performance of Hillingdon's LFRMS and associated actions will subsequently be assessed against these SEA Objectives in *Section 6.2*.

5.2 SEA Objectives

The following SEA Objectives have been produced to address the key issues identified from Task A4. These SEA Objectives will not be specifically delivered; however, the aims are likely to be addressed through the delivery of the LFRMS actions. Therefore, the SEA Objectives will support in the ongoing review of the progress made to deliver the LFRMS Action Plan.

- **SEA Objective 1:** Promote sustainable development to ensure that new infrastructure does not contribute to increased environmental degradation.
- **SEA Objective 2:** Conserve and enhance local green spaces through tree planting and the implementation of sustainable drainage systems across Hillingdon to support habitat generation and biodiversity net gain.
- **SEA Objective 3:** Increase resilience of local populations to flooding and climate change, through improvements in education, so that residents understand how to report flooding and are empowered to take action to protect their properties from flooding.
- **SEA Objective 4:** Champion initiatives geared towards supporting vulnerable communities, improving awareness of who they can contact in relation to environmental matters.
- **SEA Objective 5:** Improve the WFD status of waterbodies within Hillingdon to ensure that water quality does not decline or pose harm to wildlife.
- **SEA Objective 6:** Protect cultural and historical assets from loss, decay or decline to minimise socio-economic damages.

5.3 Task A4 consultation questions

9. Do you agree that these proposed SEA Objectives are suitable in the context of Hillingdon? If not, which Objectives are unsuitable and why?
10. Are there any other SEA Objectives that you believe should be included? If so, please provide details.

6 SCREENING ANALYSIS OF THE LFRMS

6.1 Task A5 summary

The purpose of Task A5 is to consult on the scope of the SEA, in line with *Table 1-1*. Using the Matrix presented in *Table 6-1*, the LFRMS Strategic Objectives are assessed against the SEA Objectives to understand whether there will be positive impacts, negative impacts or no effect on the SEA Objectives in the implementation of the LFRMS.

6.2 Screening analysis

The Matrix in *Table 6-1* summarises the outcomes of examining the LFRMS Strategic Objectives against the SEA Objectives; the criteria for this qualitative assessment is listed in *Table 6-2* and *Section 6.3* outlines the justification for these decisions.

The below screening analysis indicates that none of the LFRMS Strategic Objectives will negatively impact any of the SEA Objectives that were selected in Task A4. Conversely, there is likely to be both minor and major positive effects to the SEA Objectives from the delivery of Hillingdon's LFRMS, although there are some neutral outcomes where the LFRMS Strategic Objective does not relate directly to certain SEA Objectives.

Table 6-1 Scoring matrix of LFRMS against SEA Objectives

		SEA Objective Number					
		SEA 1	SEA 2	SEA 3	SEA 4	SEA 5	SEA 6
LFRMS Strategy Objective	A	++	+	++	++	0	+
	B	++	0	++	++	0	0
	C	++	++	++	0	+	0
	D	++	++	+	+	0	0
	E	0	0	++	++	0	0

Table 6-2 Legend of criteria for Table 6-1

++	Major positive effect on SEA Objective.
+	Minor positive effect on SEA Objective.
0	Neutral effect on SEA Objective and/or dependent on implementation.
-	Minor negative effect on SEA Objective.
--	Major negative effect on SEA Objective.
?	Uncertain

6.3 Screening analysis outcomes

6.3.1 LFRMS Strategic Objective A

Improve knowledge of flood risks in the London Borough of Hillingdon.

Outcome	SEA Objective	Justification
Major positive	1	By promoting sustainable development to ensure it does not contribute to increased environmental degradation across the borough, this will support improvements to local knowledge of the flood risks that residents face across the borough.
	3	By increasing the resilience of local populations to flooding, these populations will then have a greater awareness of the risk they face and how they can improve their resilience further.
	4	Local vulnerable communities, such as the elderly, should be able to contact the correct RMA so that they can report environmental issues. By doing so, these communities can improve their own knowledge of their local environmental issues, such as flood risk.
Minor positive	2	While useful to understand the types of flooding across Hillingdon, this knowledge is not essential to ensuring the conservation and enhancement of local green spaces.
	7	Sources of flooding that affect a given asset should be considered and minimised where necessary, as part of a wider asset protection and maintenance regime.
Neutral	5	This SEA Objective had little to no correlation with the LFRMS Strategic Objective A.
	6	This SEA Objective had little to no correlation with the LFRMS Strategic Objective A.
Minor negative	N/A	No SEA Objectives are likely to have a minor negative impact by the delivery of LFRMS Strategic Objective A.
Major negative	N/A	No SEA Objectives are likely to have a major negative impact by the delivery of LFRMS Strategic Objective A.
Uncertain	N/A	There were no uncertainties when assessing LFRMS Strategic Objective A with any of the SEA Objectives.

6.3.2 LFRMS Strategic Objective B

Improve the collaboration of Risk Management Authorities, and understanding of roles and responsibilities, to manage flood risk effectively

Outcome	SEA Objective	Justification
Major positive	1	If stakeholders, such as developers and planners, ensure they are aware of the roles of RMAs and their environmental and flood risk functions, collaborative efforts can bring about effective consideration and management of flood risk and other environmental issues.

Outcome	SEA Objective	Justification
	3	Clarity on who residents should report flooding to depending on the flood source is key to ensure residents have the information required to report flooding.
	4	It is imperative that all residents, but particularly the vulnerable and elderly, understand who they need to contact should they experience environmental issues or flooding. Initiatives to support vulnerable populations can improve their awareness of flood risk.
Minor positive	N/A	No SEA Objectives are likely to have a minor positive impact by the delivery of LFRMS Strategic Objective B.
Neutral	2	This SEA Objective had little to no correlation with the LFRMS Strategic Objective B.
	5	This SEA Objective had little to no correlation with the LFRMS Strategic Objective B.
	6	This SEA Objective had little to no correlation with the LFRMS Strategic Objective B.
Minor negative	N/A	No SEA Objectives are likely to have a minor negative impact by the delivery of LFRMS Strategic Objective B.
Major negative	N/A	No SEA Objectives are likely to have a major negative impact by the delivery of LFRMS Strategic Objective B.
Uncertain	N/A	There were no uncertainties when assessing LFRMS Strategic Objective B with any of the SEA Objectives.

6.3.3 LFRMS Strategic Objective C

Identify and implement opportunities for flood risk management.

Outcome	SEA Objective	Justification
Major positive	1	Implementation of new, sustainable development provides a good opportunity to incorporate flood risk management. By incorporating measures (such as sustainable drainage systems) in new developments it can be ensured that the new developments do not contribute to increased flood risk or environmental degradation.
	2	The conservation of local green spaces will bring about improved flood risk management by increasing sustainable urban drainage and natural flood management measures.
	3	By understanding historic flooding as reported by residents, Hillingdon will be better able to target mitigation measures to areas at highest risk.
Minor positive	5	Improvements to flood risk management have the potential to supplement activities that aim to enhance a waterbody's WFD status. For example, sustainable drainage systems and natural flood management can improve water quality and contribute to habitat generation.

Outcome	SEA Objective	Justification
Neutral	4	This SEA Objective had little to no correlation with the LFRMS Strategic Objective C.
	6	This SEA Objective had little to no correlation with the LFRMS Strategic Objective C.
Minor negative	N/A	No SEA Objectives are likely to have a minor negative impact by the delivery of LFRMS Strategic Objective C.
Major negative	N/A	No SEA Objectives are likely to have a major negative impact by the delivery of LFRMS Strategic Objective C.
Uncertain	N/A	There were no uncertainties when assessing LFRMS Strategic Objective C with any of the SEA Objectives.

6.3.4 LFRMS Strategic Objective D

Ensure that development within the London Borough of Hillingdon accounts for and mitigates flood risk.

Outcome	SEA Objective	Justification
Major positive	1	Accounting for environmental matters, such as flood risk, when producing guidance for sustainable development will ensure that new infrastructure does not contribute to increased flooding and instead mitigates flood risk.
	2	By enhancing local green spaces through incorporating sustainable drainage systems or natural flood management, Hillingdon would be accounting for and mitigating flood risk, while supporting opportunities for biodiversity net gain.
Minor positive	4	By creating initiatives geared towards supporting vulnerable communities, this information can be shared with developers and associated RMAs to ensure that new infrastructure addresses the needs of these populations while not increasing flood risk or environmental degradation.
Neutral	3	This SEA Objective had little to no correlation with the LFRMS Strategic Objective D.
	5	This SEA Objective had little to no correlation with the LFRMS Strategic Objective D.
	6	This SEA Objective had little to no correlation with the LFRMS Strategic Objective D.
Minor negative	N/A	No SEA Objectives are likely to have a minor negative impact by the delivery of LFRMS Strategic Objective D.
Major negative	N/A	No SEA Objectives are likely to have a major negative impact by the delivery of LFRMS Strategic Objective D.
Uncertain	N/A	There were no uncertainties when assessing LFRMS Strategic Objective D with any of the SEA Objectives.

6.3.5 LFRMS Strategic Objective E

Engage with communities to develop the awareness of flood risk in local areas and improve their resilience.

Outcome	SEA Objective	Justification
Major positive	3	By engaging with local populations to improve their knowledge on how they can report flooding, residents can become empowered to act to improve their resilience; for example, through incorporating Property Flood Resilience measures.
	4	Engagement initiatives to support vulnerable communities can ensure that they are receiving the required support and that steps are taken to improve their resilience where necessary.
Neutral	1	This SEA Objective had little to no correlation with the LFRMS Strategic Objective E.
	2	This SEA Objective had little to no correlation with the LFRMS Strategic Objective E.
	5	This SEA Objective had little to no correlation with the LFRMS Strategic Objective E.
	6	This SEA Objective had little to no correlation with the LFRMS Strategic Objective E.
Minor negative	N/A	No SEA Objectives are likely to have a minor negative impact by the delivery of LFRMS Strategic Objective E.
Major negative	N/A	No SEA Objectives are likely to have a major negative impact by the delivery of LFRMS Strategic Objective E.
Uncertain	N/A	There were no uncertainties when assessing LFRMS Strategic Objective E with any of the SEA Objectives.

6.4 Task A5 consultation questions

11. Do you have any comments on the proposed method for assessing the SEA Objectives against the LFRMS Strategic Objectives?
12. Do you agree with the screening analysis of each of the LFRMS Strategic Objectives? If not, please provide reasons as to why you would screen a certain Objective differently.

7 CONCLUSIONS AND NEXT STEPS

7.1 Conclusions

This SEA Screening Report concludes that the implementation of the actions associated with the proposed LFRMS Strategic Objectives are not likely to pose any negative effects on the environmental issues that have been identified within Hillingdon. By contrast, the outputs of this Screening Report evidence that the LFRMS Strategic Objectives have the potential to bring about both major and minor positive effects to the generated SEA Objectives, in addition to some neutral effects. As a result, the LFRMS has suitably considered the impacts of its Action Plan on Hillingdon's environmental, social and economic issues. Implementing the delivery of the LFRMS actions provides multiple opportunities to mitigate some of the key issues while ensuring that there are no detrimental impacts on these existing issues.

Based on the outcome of this SEA Screening Report, it can be concluded that the delivery of the LFRMS does not require progression onto the SEA Environmental Report (second) stage and that it is thus not necessary for a full SEA to be undertaken.

7.2 Consultation of the SEA

As part of this SEA Screening Report, a statutory consultation will be carried out over a six-week period between December 2023 to January 2024. This will enable the EA, NE and HE (as statutory consultees) to review and provide feedback on the scope of the SEA Screening Report. During a six-week period from January to February 2024, a wider public consultation will be undertaken where internal stakeholders, strategic stakeholders and members of the public will be consulted on their views on the document. Following statutory consultation and public consultation, feedback will be appropriately incorporated into the final version of the SEA Screening Report, which is due to be finalised in April 2024.

13. Do you have any comments on the conclusions within this SEA Screening Report of the LFRMS?

14. Do you have any additional comments or suggestions for this SEA Screening Report?



HILLINGDON
LONDON

Local Flood Risk Management Strategy

Habitats Regulations Assessment
Screening Report

REVISION HISTORY

Version	Date	Description	Prepared	Approved
1.0	October 2023	First full draft for client	CA	MM

EXECUTIVE SUMMARY

A Habitats Regulations Assessment (HRA) is required to be undertaken whenever a plan or programme is being implemented to ensure that the plan or programme poses no negative impacts on Natura 2000 sites. These designated sites include Ramsar Sites, Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). This HRA serves to review whether implementing the actions associated with the proposed Local Flood Risk Management Strategy (LFRMS) could pose any likely negative effects on habitats and protected areas within and in the vicinity of the London Borough of Hillingdon (Hillingdon). There are three stages of the HRA process, this document represents the Screening Assessment, which is the first stage. Through undertaking a HRA Screening Assessment, it is possible to understand the potential risks to the Natura 2000 sites in or in proximity to Hillingdon that could be brought about by implementing the Strategic Objectives of the LFRMS and associated Action Plan. As a result, the outcome of this HRA Screening Assessment can inform whether the LFRMS requires further investigation and progression of the HRA to the second stage.

Although there are no Natura 2000 sites located within Hillingdon, it is necessary to consider the sites that are in the vicinity of the borough to ensure sites that share hydraulic connections between natural ecosystems are not overlooked. Therefore, the following six Natura 2000 sites have been included within this HRA Screening Assessment: Burnham Beeches, Richmond Park, Wimbledon Common and Windsor Forest & Great Park (SACs) in addition to South West London Waterbodies and Thames Estuary & Marshes (Ramsar sites). Following the identification of these designated sites and analysis of the sites' habitats and species, a screening exercise took place whereby each LFRMS Strategic Objective was individually assessed against each designated site. The purpose of this exercise was to understand whether implementation of the LFRMS would cause any negative impacts on the identified designated sites.

To conclude the evaluation process, it is evident that the proposed LFRMS Strategic Objectives do not pose any negative impacts on the six identified designated sites. On the contrary, implementation of the LFRMS Strategic Objectives brings about opportunities for collaboration to support the improvement of the ecological status of the identified designated sites through environmental stewardship and implementation of blue-green infrastructure. Therefore, this HRA Screening Report evidences that the proposed Strategic Objectives are not likely to pose negative impacts on the designated sites in the vicinity of Hillingdon. As a result, it is not required to progress the LFRMS to the second stage of the HRA process.

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ACRONYMS AND ABBREVIATIONS

Abbreviation	Definition
DEFRA	Department for Environment, Food & Rural Affairs
FWMA	Flood and Water Management Act, 2010
Hillingdon	The London Borough of Hillingdon
HRA	Habitats Regulations Assessment
JNCC	Joint Nature Conservation Committee
LFRMS	Local Flood Risk Management Strategy
LLFA	Lead Local Flood Authority
NE	Natural England
Ramsar	Ramsar sites are wetlands of international importance, designated under the Ramsar Convention.
RMA	Risk Management Authority
SAC	Special Area of Conservation
SPA	Special Protection Area
SSSIs	Sites of Special Scientific Interest

1 INTRODUCTION

1.1 Purpose of screening

The purpose of a Habitats Regulations Assessment (HRA) is to assess the effects of a plan or programme against the conservation objectives of a European designated site for any likely significant effects in accordance with the [Conservation of Habitats and Species \(Amendment\) Regulations \(2019\)](#). By undertaking a HRA, it can be understood whether the proposed documentation would negatively impact the integrity of the conservation site. A Local Flood Risk Management Strategy (LFRMS) is considered a plan and therefore a HRA is required to ensure that the proposed LFRMS does not pose adverse impacts to the identified Natura 2000 sites within the vicinity of the London Borough of Hillingdon (Hillingdon).

European Natura 2000 sites are a network of locations with environmental protection status and include:

- **Special Areas of Conservation (SACs):** areas designated under the [European Union's Habitats Directive, 1992](#) as providing increased protection to multiple species of animals and plants in addition to habitats as part of global efforts to conserve the world's biodiversity.
- **Special Protection Areas (SPAs):** areas designated under the [European Wild Birds Directive, 2009](#) as having international importance for the conservation of rare and vulnerable bird species found within the European Union.
- **Ramsar Sites:** wetlands of international importance designated under the UK [Ramsar Convention, 1976](#) Ramsar sites may also include riparian zones, such as the banks of a watercourse.

This HRA Screening Report does not include assessment of Sites of Special Scientific Interest (SSSIs). SSSIs are areas of land and water that are considered to best represent natural heritage in terms of their flora, fauna, geology and geomorphology. However, it is not within the remit of a HRA Screening Report to assess the effects of a proposed plan on SSSIs in accordance with HRA legislation. Therefore, SSSIs have not been included within this HRA assessment.

All Natura 2000 sites will henceforth be referred to in this Report as 'designated sites' for ease of reference.

1.2 Methodology

The Department for Environment, Food & Rural Affairs (DEFRA) collaborated with Natural England (NE), the Welsh Government and Natural Resources Wales to publish [guidance on HRAs, 2021](#). In accordance with the guidance, three stages must be undertaken to complete a full HRA. These three stages are detailed in *Table 1-1*.

Table 1-1 Summary of HRA Stages

HRA Stage	Purpose
Stage 1 – Screening Assessment	To check if the proposal is likely to have a significant effect on the site’s conservation objectives.
Stage 2 – Appropriate Assessment	To assess the likely significant effects of the proposal in more detail and identify ways to avoid or minimise any effects.
Stage 3 – Derogation Assessment	To consider if proposals would have an adverse effect on a Designated Site quality for exemption.

This document represents the first stage of the HRA process – the Screening Assessment. By assessing the potential impacts of the proposed LFRMS, this Screening Report will determine whether a full HRA is required.

1.3 Consultation process

It is required that this HRA Screening Report undergoes a statutory consultation process involving NE as statutory consultee. NE will review and provide feedback on the scope and results of this HRA Screening Report during a six-week period from December 2023 to January 2024. As part of this process, the statutory consultees will have sight of the consultation questions within this HRA Screening Report, which are detailed in *Section 1.4*. Any feedback provided will be integrated into an updated version of this document. Following this, a public consultation will be undertaken during a six-week period from January to February 2024, during which members of the public, internal stakeholders and strategic stakeholders will be able to provide comment on this HRA Screening Report. Similarly, suggested amendments will be reviewed and incorporated into the final version prior to finalisation of this document.

1.4 HRA consultation questions

In line with *Section 1.3*, those consulted on this HRA Screening Report will be asked specific questions to ensure that this Screening Assessment satisfies the HRA requirements. The below eight questions correspond to the first task of the HRA process, as presented in *Table 1-1*.

Identifying relevant sites

1. Do you feel that we have included all the designated sites that may be significantly affected by the implementation of the LFRMS? If not, please state any additional sites that you believe should be included.
2. Do you feel that we have included all the relevant information for each of the identified designated sites?

Screening analysis:

3. Do you have any comments on the method of assessment of the HRA sites against the LFRMS Strategic Objectives?
4. Do you agree with the screening analysis for each of the LFRMS Objectives? If not, please explain why you would screen a certain LFRMS Objective differently.

Conclusions and further comments:

5. Do you have any comments on the conclusions within this HRA Screening Report of the LFRMS?
6. Do you have any additional comments or suggestions for this HRA Screening Report?

1.5 Summary of Local Flood Risk Management Strategy

The [Flood and Water Management Act 2010 \(FWMA\)](#) brought about the role of the Lead Local Flood Authority (LLFA), which is the unitary authority or county council. Hillingdon undertakes the role of the LLFA and, under Section 9 of the FWMA, is responsible for developing, maintaining, applying and monitoring a Strategy for local flood risk management in its area. The purpose of a LFRMS is to assess local flood risks, set out the roles and responsibilities of relevant risk management authorities (RMAs) and develop Strategic Objectives to manage local flood risk. As stipulated by the FWMA, a LFRMS must be updated every six years, or as and when there are any changes to policy or legislation. The three documents associated with the LFRMS include the detailed Action Plan which sets out measures to achieve the Strategic Objectives, a Strategic Environmental Assessment and this HRA Screening Report.

Five Strategic Objectives have been identified in alignment with the Environment Agency’s National Flood and Coastal Erosion Risk Management Strategy and local Council priorities:

Figure 1-1 LFRMS Strategic Objectives



2 SITE INFORMATION

2.1 Introduction to the sites

Within the first stage of the HRA process (Screening Assessment), the first task is to identify whether there are any designated sites within or in close proximity to Hillingdon. A buffer distance of 10km was applied to determine whether a given site is located near enough to Hillingdon to be assessed as part of the HRA process. No designated sites were identified within Hillingdon. However, four SAC sites and two Ramsar sites were identified within 10km of the borough boundary; these designated sites are illustrated in Figure 2-1. Investigation has been undertaken to ensure that the LFRMS poses no potential adverse impacts to the identified designated sites. More information on the individual sites is detailed in *Section 2.2*.

2.2 Sites within Hillingdon

No designated Natura 2000 sites were identified within Hillingdon.

2.3 Sites in proximity to Hillingdon

Six sites have been identified as being in close proximity to Hillingdon. These are:

- Site 1: Burnham Beeches
- Site 2: Richmond Park
- Site 3: Wimbledon Common
- Site 4: Windsor Forest & Great Park
- Site 5: South West London Waterbodies
- Site 6: Thames Estuary & Marshes

Burnham Beeches, Richmond Park and South West London Waterbodies are all located either wholly or partially within Hillingdon. Wimbledon Common has been included within this screening assessment because it is connected hydraulically to Richmond Park via the Beverley Brook. The Thames Estuary & Marshes have been included because they are where the River Thames meets the waters of the North Sea and are hydraulically connected to Hillingdon via the River Thames.

The following six tables detail a full breakdown of information for each site, including species and habitat details, general site character and current conditions and threats. Information has been collated from the following sources:

- [Joint Nature Conservation Committee \(JNCC\)](#)
- [Natural England](#)
- [DEFRA's Magic Map database](#)

Table 2-1 Burnham Beeches summary

Site name	Burnham Beeches
Site designation	SAC site
EU code	UK0030034
Area (ha)	384

Qualifying species and/or habitat features	<ul style="list-style-type: none"> H9120 Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>)
General site character (% area)	<ul style="list-style-type: none"> Heath, Scrub, Maquis and Garrigue, Phygrana (5%) Broad-leaved deciduous woodland (90%) Coniferous woodland (5%)
Current condition and threats	<ol style="list-style-type: none"> Air pollution (risk of atmospheric nitrogen deposition) affecting H9120 Public access/disturbance affecting H9120 Habitat fragmentation affecting H9120 Deer affecting H9120 Species decline affecting H9120 Invasive species affecting H9120
Supplementary evidence	Site Improvement Plan – Burnham Beeches Conservation Objectives for Burnham Beeches JNCC Burnham Beeches – SAC

Table 2-2 Richmond Park summary

Site name	Richmond Park
Site designation	SAC site
EU code	UK0030246
Area (ha)	846
Qualifying species and/or habitat features	<ul style="list-style-type: none"> S1083 Stag beetle, <i>Lucanus cervus</i>
General site character (% area)	<ul style="list-style-type: none"> Inland water bodies (Standing water, Running water) (1.5%) Bogs, Marshes, Water fringed vegetation, Fens (0.5%) Heath, Scrub, Maquis and Garrigue, Phygrana (25%) Dry grassland, Steppes (18%) Humid grassland, Mesophile grassland (5%) Improved grassland (20%) Broad-leaved deciduous woodland (25%) Mixed woodland (5%)
Current condition and threats	<p>There are no current issues affecting the Natura 2000 features on this site.</p> <p>The Richmond Park Management Plan should continue to be periodically reviewed to ensure the continuing availability of decaying wood habitat.</p>
Supplementary evidence	Site Improvement Plan – Richmond Park Conservation Objectives for Richmond Park JNCC Richmond – SAC

Table 2-3 Wimbledon Common summary

Site name	Wimbledon Common
Site designation	SAC site

EU code	UK0030301
Area (ha)	351
Qualifying species and/or habitat features	<ul style="list-style-type: none"> • S1083 Stag beetle, <i>Lucanus cervus</i> • H4010 Northern Atlantic wet heaths with <i>Erica tetralix</i> • H4030 European dry heaths
General site character (% area)	<ul style="list-style-type: none"> • Inland water bodies (Standing water, Running water) (1%) • Bogs, Marshes, Water fringed vegetation, Fens (0.5%) • Heath, Scrub, Maquis and Garrigue, Phygrana (5%) • Dry grassland, Steppes (45%) • Improved grassland (3.5%) • Broad-leaved deciduous woodland (45%)
Current condition and threats	<ol style="list-style-type: none"> 1. Public access/disturbance affecting H4010, H4030 and S1083 2. Habitat fragmentation affecting S1083 3. Invasive species affecting H4010, H4030 and S1083 4. Air pollution (impact of atmospheric nitrogen deposition) affecting H4010 and H4030
Supplementary evidence	Site Improvement Plan – Wimbledon Common Conservation Objectives for Wimbledon Common JNCC Wimbledon Common – SAC

Table 2-4 Windsor Forest & Great Park summary

Site name	Windsor Forest & Great Park
Site designation	SAC site
EU code	UK0012586
Area (ha)	1,680
Qualifying species and/or habitat features	<ul style="list-style-type: none"> • S1079 Violet click beetle <i>Limoniscus violaceus</i> • H9190 Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains • H9120 Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>)
General site character (% area)	<ul style="list-style-type: none"> • Inland water bodies (Standing water, Running water) (0.5%) • Dry grassland, Steppes (4.5%) • Mixed woodland (95%)
Current condition and threats	<ol style="list-style-type: none"> 1. Forestry and woodland management affecting H9120, H9190 and S1079 2. Invasive species affecting H9190 and S1079 3. Disease affecting H9190 4. Air pollution (impact of atmospheric nitrogen deposition) affecting H9120 and H9190

Supplementary evidence

[Site Improvement Plan – Windsor Forest & Great Park](#)
[Conservation Objectives for Windsor Forest & Great Park](#)
[JNCC Windsor Forest & Great Park – SAC](#)

Table 2-5 South West London Waterbodies summary

Site name	South West London Waterbodies
Site designation	Ramsar site
EU code	UK9012171
Area (ha)	828
Qualifying species and/or habitat features	<ul style="list-style-type: none"> • A051 Gadwall, <i>Anas strepera</i> • A056 Shoveler, <i>Anas clypeata</i> • Great cormorant, <i>Phalacrocorax carbo</i> • Great crested grebe, <i>Podiceps cristatus</i> • Common pochard, <i>Aythya farina</i> • Tufted duck, <i>Aythya fuligula</i> • Eurasian coot, <i>Fulica atra</i>
General site character (% area)	<ul style="list-style-type: none"> • Reservoirs/barrages/dams (45%) • Gravel/brick/clay pits (25%) • Other (30%)
Current condition and threats	<ol style="list-style-type: none"> 1. Public access/disturbance affecting A051 and A056 2. Changes in species distributions affecting A051 and A056 3. Invasive species affecting A051 and A056
Supplementary evidence	Site Improvement Plan – South West London Waterbodies Conservation Objectives for South West London Waterbodies Information Sheet on Ramsar Wetlands – South West London Waterbodies

Table 2-6 Thames Estuary & Marshes

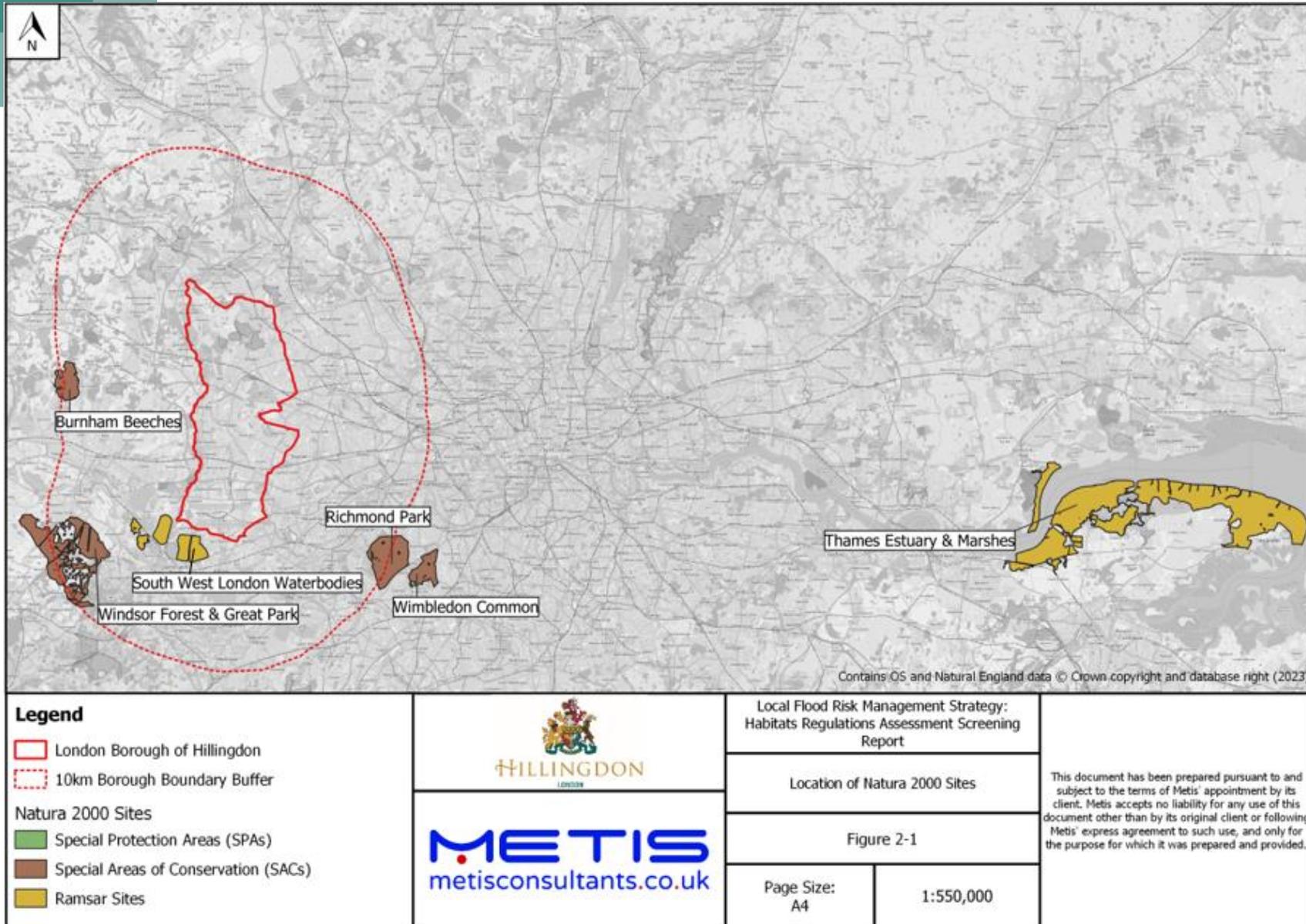
Site name	Thames Estuary & Marshes
Site designation	Ramsar site
EU code	UK9012021A
Area (ha)	5,589
Qualifying species and/or habitat features	<ul style="list-style-type: none"> • A046: Dark-bellied Brent Goose, <i>Branta bernicla</i> • A048: Common shelduck, <i>Tadorna</i> • A054: Pintail, <i>Anas acuta</i> • A056: Shoveler, <i>Spatula clypeata</i> • A081: Marsh harrier, <i>Circus aeruginosus</i> • A082: Hen harrier, <i>Circus cyaneus</i> • A132: Avocet, <i>Recurvirostra</i> • A137: Ringed plover, <i>Charadrius hiaticula</i> • A140: Golden plover, <i>Pluvialis apricaria</i> • A141: Grey plover, <i>Pluvialis squatarola</i> • A143: Red knot, <i>Calidris canutus</i>

	<ul style="list-style-type: none"> • A149: Dunlin, <i>Calidris alpina alpina</i> • A156: Black-tailed godwit, <i>Limosa limosa islandica</i> • A157: Bar-tailed godwit, <i>Limosa lapponica</i> • A162: Common redshank, <i>Tringa tetanus</i> • A176: Mediterranean gull, <i>Ichthyaetus melanocephalus</i> • A195: Little tern, <i>Sternula albifrons</i>
General site character (% area)	<ul style="list-style-type: none"> • Sand/shingle shores (including dune systems) (0.8%) • Tidal flats (49.6%) • Salt marshes (1.3%) • Freshwater lakes: permanent (0.7%) • Saline/brackish lakes: permanent (4.2%) • Saline/brackish marshes: seasonal/intermittent (3.2%) • Seasonally flooded agricultural land (38.6%) • Other (1.6%)
Current condition and threats	<ol style="list-style-type: none"> 1. Coastal squeeze affecting all species 2. Public access/disturbance affecting all species 3. Invasive species affecting all species 4. Changes in species distribution affecting all species 5. Fisheries: Commercial marine and estuarine affecting all species 6. Vehicles: Illicit affecting all species 7. Air pollution (risk of atmospheric nitrogen deposition) affecting A082 and A195
Supplementary evidence	Site Improvement Plan – Greater Thames Complex Conservation Objectives for Thames Estuary & Marshes Information Sheet on Ramsar Wetlands – Thames Estuary & Marshes

2.4 Consultation questions about the identified sites

1. Do you feel that we have included all the designated sites that may be significantly affected by the implementation of the LFRMS? If not, please state any additional sites that you believe should be included.
2. Do you feel that we have included all the relevant information for each of the identified designated sites?

Figure 2-1 Map illustrating locations of selected Natura 2000 sites



3 SCREENING ANALYSIS

3.1 Screening analysis summary

Within the first stage of the HRA (Screening Assessment), the second task is to assess each of the proposed LFRMS Strategic Objectives against each of the identified designated sites. The purpose of this is to ascertain whether there will be any adverse effects on the designated sites by implementing the LFRMS Strategic Objectives and associated actions. Should any negative impacts be identified, this HRA Screening Report will progress to the second stage and a full HRA will be required.

3.2 Screening analysis

Based on the information presented in *Section 2.3*, each LFRMS Strategic Objective has been screened against the identified designated sites to determine whether there will be a potential negative impact on the sites, a potential significant negative impact on the sites or no effect on the sites. An adverse impact could be classified as a disturbance to the natural processes that support the sites' features, a decline in the quantity or quality of habitats or species, or a limitation to the potential of restoring the habitats or species in the future. The results of the analysis between the LFRMS Strategic Objectives and the identified designated sites is presented in *Table 3-1* and the criteria used to assess the proposed LFRMS Strategic Objectives against the designated sites is detailed in *Table 3-2*. The results of the screening analysis evidence that none of the LFRMS Strategic Objectives pose any negative impacts to the six identified designated sites.

Table 3-1 Screening analysis results of the LFRMS Strategic Objectives against the HRA sites

		HRA Site Name					
		Burnham Beeches	Richmond Park	Wimbledon Common	Windsor Forest & Great Park	South West London Waterbodies	Thames Estuary & Marshes
LFRMS Strategic Objective	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0

Table 3-2 Screening analysis criteria

0	The strategic objective will have no effect on a Natura 2000 site.
-	The strategic objective could have a potential negative effect on a Natura 2000 site.
--	The strategic objective could have a potential significant negative effect on a Natura 2000 site.
?	Uncertain

3.3 Screening analysis outcomes

3.3.1 LFRMS Strategic Objective A

Improve knowledge of flood risks in the London Borough of Hillingdon.

Strategic Objective A is unlikely to pose any adverse effects on any of the six identified designated sites. This Strategic Objective is centred on improving the knowledge of flood risks across Hillingdon. Improvements in the local communities' awareness can encourage greater environmental stewardship and can offer additional opportunities for environmental conservation work. Strategic Objective A also does not involve the physical implementation of anything that would harm the identified sites. Therefore, no further investigation into the potential negative effects of Strategic Objective A on the designated sites is required.

3.3.2 LFRMS Strategic Objective B

Improve the collaboration of Risk Management Authorities, and understanding of roles and responsibilities, to manage flood risk effectively

Strategic Objective B is unlikely to pose any adverse effects on any of the six identified designated sites. This Strategic Objective is centred on improving the understanding of the roles and responsibilities of RMAs to effectively manage flood risk across Hillingdon. Partnership working among NE, the LLFA and other RMAs can encourage greater collaboration and can offer additional opportunities to actively protect the designated sites. For example, incorporating blue-green infrastructure can bring about benefits to water quality and habitats. Strategic Objective B also does not involve the physical implementation of anything that would harm the identified sites. Therefore, no further investigation into the potential negative effects of Strategic Objective B on the designated sites is required.

3.3.3 LFRMS Strategic Objective C

Identify and implement opportunities for flood risk management.

Strategic Objective C is unlikely to pose any adverse effects on any of the six identified designated sites. This Strategic Objective is centred on the identification and implementation of opportunities for flood risk management. Measures such as sustainable drainage systems and natural flood management can offer protection against flooding, mitigate the effects of climate change and can enhance the ecological status of the identified designated sites. The implementation of these measures will be reviewed regularly to ensure that proposed features do not cause adverse effects on any downstream habitats. Strategic Objective C also does not involve the physical implementation of anything that would harm the identified sites. Therefore, no further investigation into the potential negative effects of Strategic Objective C on the designated sites is required.

3.3.4 LFRMS Strategic Objective D

Ensure that development within the London Borough of Hillingdon accounts for and mitigates flood risk.

Strategic Objective D is unlikely to pose any adverse effects on any of the six identified designated sites. This Strategic Objective is centred on ensuring proposed development within Hillingdon accounts for and mitigates flood risk. By ensuring that applicants adhere to relevant planning

policies, it can be confirmed that infrastructure meets policy requirements on biodiversity and habitat protection. This is further supported by the implementation of the SuDS Approval Body, which is detailed in the LFRMS. Therefore, future development will be sustainable, can encourage better environmental outcomes and can offer the opportunity to ensure that flood risk mitigation measures also provide protection to designated sites. Strategic Objective D also does not involve the physical implementation of anything that would harm the identified sites. Therefore, no further investigation into the potential negative effects of Strategic Objective D on the designated sites is required.

3.3.5 LFRMS Strategic Objective E

Engage with communities to develop the awareness of flood risk in local areas and improve their resilience.

Strategic Objective E is unlikely to pose any adverse effects on any of the six identified designated sites. This Strategic Objective is centred on the importance of engaging with local community groups to develop their awareness of flood risk and to subsequently improve their resilience. Through active engagement, residents can feel empowered to take action to reduce their own flood risk and improve their resilience. It is important that community groups understand the importance of green spaces, which can reduce surface water runoff while enhancing biodiversity and therefore can benefit conservation efforts within the designated sites. Strategic Objective E also does not involve the physical implementation of anything that would harm the identified sites. Therefore, no further investigation into the potential negative effects of Strategic Objective E on the designated sites is required.

3.4 Consultation questions for the screening analysis

3. Do you have any comments on the method of assessment of the HRA sites against the LFRMS Strategic Objectives?
4. Do you agree with the screening analysis for each of the LFRMS Objectives? If not, please explain why you would screen a certain LFRMS Objective differently.

4 CONCLUSIONS AND NEXT STEPS

4.1 Conclusions

This HRA Screening Report concludes that the implementation of the LFRMS Strategic Objectives will not pose any negative impacts on the six Natura 2000 sites that were identified as part of the screening assessment. By contrast, the delivery of the LFRMS Strategic Objectives aim to enhance and protect natural environments within and surrounding Hillingdon. Based on the outcome of this Screening Report, it can be concluded that the delivery of the LFRMS Strategic Objectives does not require progression onto the HRA Appropriate Assessment (second) stage and that it is thus not necessary for a full HRA to be undertaken.

4.2 Consultation of the HRA

As part of this HRA Screening Report, a statutory consultation will be carried out over a six-week period between December 2023 to January 2024. This will enable NE (as statutory consultee) to review and provide feedback on the scope of the HRA Screening Report. During a six-week period from January to February 2024, a wider public consultation will be undertaken where internal stakeholders, strategic stakeholders and members of the public will be consulted on their views on the document. Following statutory consultation and public consultation, feedback will be appropriately incorporated into the final version of the HRA Screening Report, which is due to be finalised in April 2024.

5. Do you have any comments on the conclusions within this HRA Screening Report of the LFRMS?
6. Do you have any additional comments or suggestions for this HRA Screening Report?