Westminster City Council

Westminster Local Flood Risk Management Strategy

SEA Environmental Report



001
September 2024

Public

Westminster City Council

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Type of document (version) Public

Project no. 70112284

Our Ref. No. 001

Date: September 2024

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Quality control

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	First Draft	Final for Consultation		
Date	September 2024	September 2024		
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Project number	70112284	70112284		
Report number	V1	V1		

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1 Introduction

1.1 Overview

1.1.1. Westminster City Council (WCC) is in the process of preparing a new Local Flood Risk Management Strategy (hereafter referred to as the 'LFRMS'). This will replace the existing WCC LFRMS[1], which was agreed in 2017.

1.1.2. The LFRMS will cover WCC's administrative boundary, as shown in **Figure 1-1**.

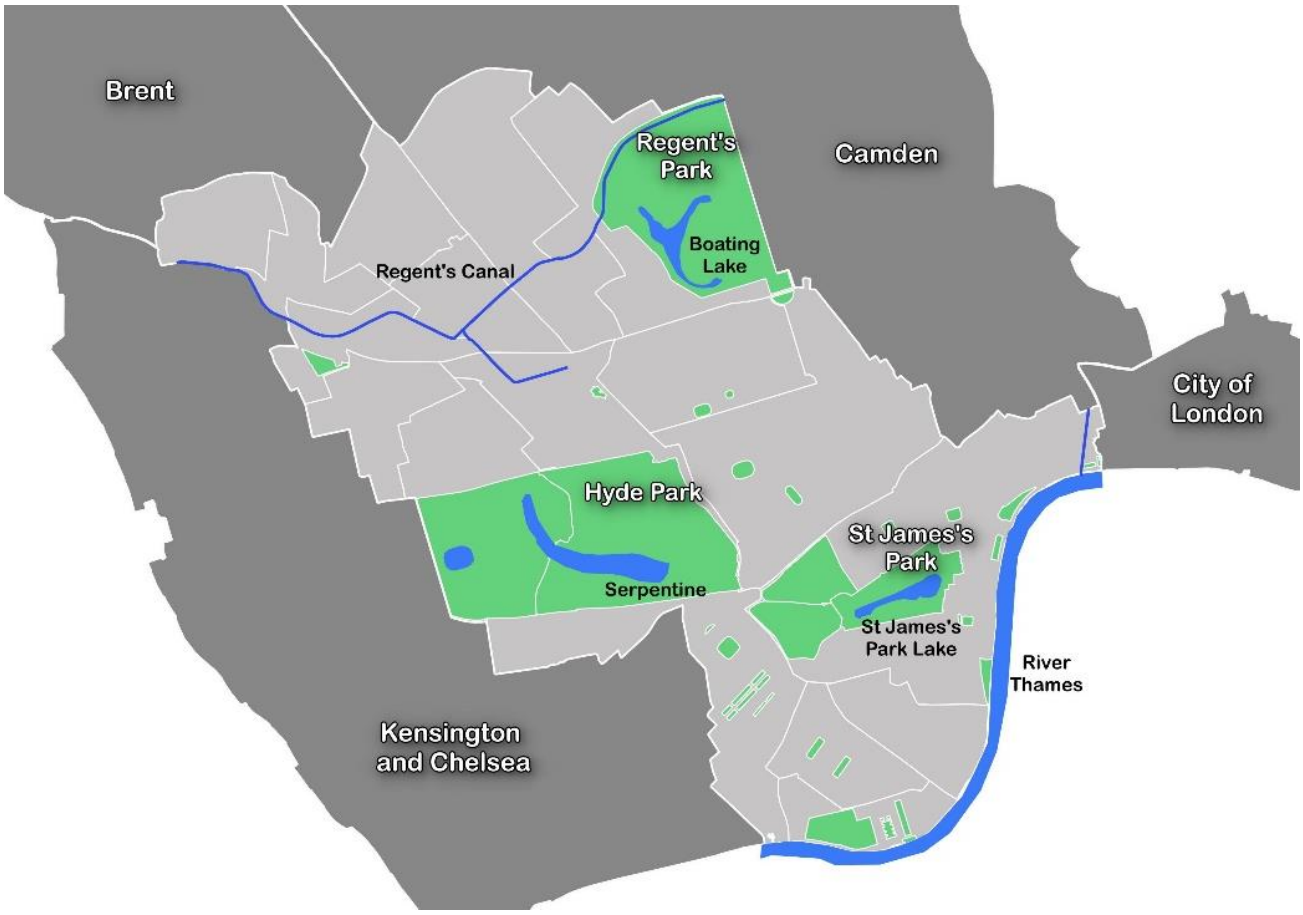
1.1.3. WCC is a unitary authority located on the north side of the River Thames in central London, covering 21.5 km^2. It is home to a long standing and diverse residential community, as well as the Houses of Parliament and virtually all government and related departments, No. 10 Downing Street and New Scotland Yard. Buckingham Palace and the Royal Courts of Justice are located within 2 km of the River Thames. Westminster contains important national and local infrastructure. It has four of London's main line railway termini and 10 out of the 12 London underground lines.

1.1.4. As well as the River Thames, the city contains other water features, including Regent's Canal, the Grand Union Canal, Paddington Basin and Little Venice, totalling 6.4 km of canal frontage. There are also five 'hidden rivers'; the Westbourne, Tyburn, Tyburn Brooke, Kilbourne and Long Ditch. The Serpentine (in Hyde Park) and the lakes in Buckingham Palace Gardens and St James's Park are the places where the Westbourne surfaces in Westminster, although they are now disconnected from the original watercourse.

1.1.5. The LFRMS will focus on local sources of flood risk but will also acknowledge and consider other sources of flood risk (including sewers) and other associated Risk Management Authorities.

[1] Westminster City Council (2017) Local Flood Risk Management Strategy 2017 – 2022. Available from: https://www.westminster.gov.uk/media/document/en-env-011---local-flood-risk-management-strategy-2017-2022

Figure 1-1 - Westminster City Council Boundary Location[2]



1.2 Local Flood Risk Management Strategy

1.2.1. The Flood and Water Management Act 2010[3] provides for better and more comprehensive management of flood risk for people, homes and businesses, whilst helping to safeguard communities from rises in surface water and protecting water supplies.

1.2.2. The Act defines 'local flood risk'; as that arising from:

- Surface runoff;
- Groundwater; and
- Ordinary watercourses (including risks from lakes, ponds, or other areas of water that flow into an ordinary watercourse.

[2] Westminster City Council (2024) Local Flood Risk Management Strategy
[3] Flood and Water Management Act 2010. Available at: https://www.legislation.gov.uk/ukpga/2010/29/contents

1.2.3. The Act states that Lead Local Flood Authorities (LLFA) are required to develop, maintain, apply and monitor a strategy for local flood risk management in its area.

1.2.4. WCC is the LLFA for the administrative area of the City of Westminster and have determined that a Strategic Environmental Assessment (SEA) is required for their LFRMS, having considered the requirements of the Environmental Assessment of Plans and Programmes Regulations 2004[4] (hereafter referred to as the 'SEA Regulations').

1.2.5. The National Strategy for Flood and Coastal Erosion Risk Management for England[5] (FCERM) (hereafter referred to as the 'National Strategy') outlines the strategy for national flood risk management across England. The National Strategy sets out three long term ambitions for the management of flood and coastal erosion risk in England:

- Climate resilient places;
- Today's growth and infrastructure resilient in tomorrow's climate; and
- A nation ready to respond and adapt to flooding and coastal change.

1.2.6. The LFRMS must be consistent with the National Strategy which will ensure that the objectives set out within the National Strategy are delivered through the work of all the Risk Management Authorities in England.

1.3 Purpose of the Report

1.3.1. WCC has commissioned WSP to undertake a SEA of the LFRMS.

1.3.2. SEA is used to describe the application of environmental assessment to plans and programmes in accordance with the European Council Directive 2001/42/EC (SEA Directive), which is transposed in England through the Environmental Assessment of Plans and Programmes Regulations 2004[6] (SEA Regulations).

1.3.3. SEA is mandatory for plans (including strategies) and programmes which are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste or water management, telecommunications, tourism, town and country planning or land use, and which set the framework for future development consent of projects listed in the Environmental Impact

[4] UK Statutory Instruments 2004 No. 1656, The Environmental Assessment of Plans and Programmes Regulations 2004. Available at: https://www.legislation.gov.uk/uksi/2004/1633/contents
[5] Environment Agency, National Flood and Coastal Erosion Risk Management for England. Available at: https://assets.publishing.service.gov.uk/media/5f6b6da6e90e076c182d508d/023_15482_Environment_agency_digitalAW_Strategy.pdf
[6] UK Statutory Instruments 2004 No. 1656, The Environmental Assessment of Plans and Programmes Regulations 2004. Available at: https://www.legislation.gov.uk/uksi/2004/1633/contents

Assessment Directive 85/337/EEC[7] and the Town and Country Planning (Environmental Impact Assessment) Regulations[8].

1.3.4. SEA is an iterative process of gathering data and evidence, assessment of environmental effects, developing mitigation measures and making recommendations to refine plans or programmes in view of the predicted environmental effects.

1.3.5. This report sets out the second stage of the SEA process following on from the Scoping Report which determined the issues to be included in the SEA. This report sets out:

- Information on the LFRMS (**Section 2**);
- The methodology used for the SEA (**Section 3**);
- A summary of the issues and opportunities identified during scoping (**Section 4**);
- The results of the SEA (**Section 5, Section 6, and Section 7**);
- Cumulative effects (**Section 8**);
- Mitigation, enhancements and monitoring (**Section 9**)
- Recommendations (**Section 10**); and
- Next Steps (**Section 11**).

[7] Environmental Impact Assessment Directive (85/337/EEC) 2014 Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0052&from=EN
[8] The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 Available at: http://www.legislation.gov.uk/uksi/2017/571/introduction/made

2 Westminster Local Flood Risk Management Strategy

2.1 Background

2.1.1. WCC previously produced a LFRMS for 2017 – 2022[9]. This Strategy will build upon the lessons from the previous Strategy: to continue to develop understanding of flood risk and improve how management of it.

2.1.2. This LFRMS provides an action plan for 2024 – 2030 with clear objectives and measures, setting out how local flood risk will be managed by WCC and other Risk Management Authorities (RMAs). This strategy also considers the impact of climate change on flooding in the future and attempts to minimise these risks.

2.2 Objectives and Measures

2.2.1. The LFRMS sets out the flood risk management objectives, measures and actions. These three groupings provide different levels of detail on how flood risk will be managed.

2.2.2. Objectives are defined as the overarching vision, aligned with the National Strategy. Measures are the next step to achieving these objectives, linked to local needs within Westminster. Finally, the measures are broken down into actions, providing specific (and often time-bound) targets.

2.2.3. The aims of the Strategy are:

- To meet the statutory duties of an LLFA under the Flood and Water Management Act;
- To provide an understanding of local flood risk within Westminster, using knowledge from all RMAs;
- To ensure RMAs have a mechanism to work together effectively to understand and deliver appropriate flood risk management; and,
- To set objectives, measures and actions to sustainably manage flood risk in Westminster, addressing other societal or environmental objectives where possible.

2.2.4. **Table 2-1** below outlines the proposed objectives and measures within the LFRMS.

[9] Westminster City Council (2017) Local Flood Risk Management Strategy 2017 – 2022. Available from: https://www.westminster.gov.uk/media/document/en-env-011---local-flood-risk-management-strategy-2017-2022 [Accessed 18 April 2023]

Table 2-1 - LFRMS Objectives and Measures

Objective	Measures
Objective 1: To better understand and explain the level of local flood risk affecting Westminster with partners, businesses and communities.	Create an integrated record of historic flooding and sources of flood risk in Westminster through data collection.
	Quantify, visualise and communicate risk to understand the exposure to risk and the cost that this may incur to businesses, residents and communities.
	Engage with local forums, residents associations, communities, businesses and social enterprise to provide further information in relation to flood risk management.
	Promote a better understanding of flood risk with partners through information sharing and engage in stronger collaboration efforts.
Objective 2: To develop holistic, integrated, multi-beneficial and sustainable approaches to flood risk management in Westminster.	Increase opportunities for biodiversity, ecosystem services or urban greening to complement water management in Westminster.
	Continue to implement public realm SuDS with target to attenuate 15% of water above the surface for a 1:30yr event (3.33% AEP) from the SuDS Catchments by 2030.
	Connect complimentary internal and London-wide strategies (including the London Surface Water Strategy) to ensure maximised flood risk and wider environmental benefits are realised.
Objective 3: To promote and ensure preparedness, resilience and recovery to local flood risk with partners, businesses and communities.	Implement a system of identifying, contacting and providing support to residents before, during and after flood events by 2026.
	Improve resilience and recovery amongst partners, businesses and communities.
Objective 4: To ensure all development takes	Streamline local planning guidance and clarify necessary documentation for all developments by 2025.

Objective	Measures
an integrated approach to flood risk management, ensuring it is sustainable and delivers improvements.	Ensure all new developments consider SuDS, with preference to above ground SuDS by 2025.
Objective 5: To adopt and implement a collaborative approach to flood risk management in Westminster with partners, businesses, and communities.	Engage in regional networks for sharing of knowledge and best practice.
	Work with other RMAs and risk management stakeholders to engage communities.
	Encourage the involvement of communities and businesses in Flood Risk Management.

3 Methodology

3.1 Introduction

3.1.1. SEA is a systematic process that is undertaken during the preparation of a plan. Its role is to promote sustainable development by assessing environmental, social, and economic impacts, as well as mitigating any potential adverse effects that the plan might otherwise have.

3.2 Sustainability Appraisal

3.2.1. The SEA process is carried out during the preparation of local plans and spatial development strategies. Its role is to promote sustainable development by assessing the extent to which emerging plans will help to achieve relevant environmental, economic, and social objectives.

3.2.2. SEA is used to describe the application of environmental assessment to plans and programmes in accordance with the SEA Regulations.

3.2.3. SEA is mandatory for plans and programmes which are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste or water management, telecommunications, tourism, town and country planning or land use, and which set the framework for future development consent of projects listed in Annex I or II to Council Directive 85/337/EEC[10].

3.2.4. **Table 3-1** below sets out the SEA process.

Table 3-1 - SEA Stages

SEA Stages	SEA Stages and Tasks	Purpose
Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope		
A1	Identifying other relevant plans, programmes and environmental protection objectives to identify SEA objectives.	To establish how the Plan or programme is affected by outside factors, to suggest ideas for how any constraints can be addressed, and to help.

[10] Official Journal of the European Communities, Council Directive of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment (85/337/EEC). Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31985L0337&from=EN (Accessed 01/11/2023)

SEA Stages	SEA Stages and Tasks	Purpose
A2	Collecting baseline information	To provide an evidence base for environmental problems, prediction of effects, and monitoring; to help in the development of SEA objectives.
A3	Identifying environmental problems	To help focus the SEA and streamline the subsequent stages, including baseline information analysis, setting of the SEA objectives, prediction of effects and monitoring.
A4	Developing SEA objectives	To provide a means by which the environmental performance of the Plan or programme and alternatives can be assessed.
A5	Consulting on the scope of SEA	To ensure that the SEA covers the likely significant environmental effects of the Plan or programme.
Stage B: Developing and refining alternatives and assessing effects		
B1	Testing the Plan or programme objectives against the SEA objectives	To identify potential synergies or inconsistencies between the objectives of the Plan or programme and the SEA objectives and help in developing alternatives.
B2	Developing strategic alternatives	To develop and refine strategic alternatives.
B3	Predicting the effects of the Plan or programme, including alternatives	To predict the significant environmental effects of the Plan or programme and alternatives.
B4	Evaluating the effects of the Plan or programme, including alternatives	To evaluate the predicted effects of the Plan or programme and its alternatives and assist in the refinement of the Plan or programme.
B5	Mitigating adverse effects	To ensure that adverse effects are identified, and potential mitigation measures are considered.

SEA Stages	SEA Stages and Tasks	Purpose
B6	Proposing measures to monitor the environmental effects of plan or programme implementation	To detail the means by which the environmental performance of the Plan or programme can be assessed
Stage C: Preparing the Environmental Report		
C3	Preparing the Environmental Report (current stage)	To present the predicted environmental effects of the Plan or programme, including alternatives, in a form suitable for public consultation and use by decision-makers.
Stage D: Consulting on the draft plan or programme and the Environmental Report (Current Stage)		
D1	Consulting the public and Consultation Bodies on the draft plan or programme and the Environmental Report	To give the public and the Consultation Bodies an opportunity to express their opinions on the findings of the Environmental Report and to use it as a reference point in commenting on the Plan or programme. To gather more information through the opinions and concerns of the public.
D2	Assessing significant changes	To ensure that the environmental implications of any significant changes to the draft plan or programme at this stage are assessed and taken into account.
D3	Making decisions and providing information	To provide information on how the Environmental Report and consultees' opinions were taken into account in deciding the final form of the Plan or programme to be adopted.
Stage E: Monitoring the significant effects of the plan on the environment		
E1	Developing aims and methods for monitoring	To track the environmental effects of the Plan to show whether they are as predicted and to help identify adverse effects.

SEA Stages	SEA Stages and Tasks	Purpose
E2	Responding the adverse effects	To prepare for appropriate responses where adverse effects are identified.

3.3 Environmental Report Methodology

3.3.1. Stage C3 (this stage) comprises the assessment of the draft LFRMS Plan, against the SEA Appraisal Framework objectives identified within the Scoping Report (Stage A). This Report will then be consulted on, alongside the draft LFRMS. Responses received and the actions taken will then be incorporated into later iterations of the SEA Report.

3.3.2. As per the SEA regulations, the SEA also needs to consider and compare all reasonable alternatives as the LFRMS evolves and assess these against the baseline environmental, economic and social characteristics of the borough. Reasonable alternatives are the different realistic options considered by the plan-maker in developing the policies in the plan.

3.3.3. As there are no proposed alternative measures, the SEA has considered the plan's previous strategy and interventions as reasonable alternatives as a 'do nothing' scenario.

3.3.4. This Environmental Report has therefore covered the assessment of the following:

- Compatibility assessment of the objectives;
- Proposed measures; and
- Alternative measures.

3.4 Compatibility Assessment

3.4.1. Testing the compatibility of the LFRMS's Objectives against the SEA Appraisal Framework help to identify both potential synergies and inconsistencies. This information can help in developing and refining the objectives of the Local Plan. See Section 5 for further details.

3.5 Assessment of Effects

3.5.1. The assessment of measures has considered the following effects:

- Overall effect significance (negative, positive, uncertain, potential for both negative and positive effect or negligible)
- Magnitude of effects (high, medium, low):
  - High: Likely total loss of or major alteration to the receptor in question. The effects are predicted to be permanent and irreversible.
  - Medium: Partial loss of/alteration/improvement to one or more key elements/features/characteristics of the receptor in question. The effects are predicted to be medium-long term but often reversible.

- Low: Minor loss/alteration/improvement to one or more key elements/features/characteristics of the receptor in question. The effects are often predicted to be reversible and short term.

- Nature of effect (direct, indirect)
- Spatial Extent (local, regional, national)
- Reversibility of effect:
  - Reversible: The receptor can return to baseline condition without significant intervention
  - Irreversible: The receptor would require significant intervention to return to baseline condition
- Duration (short, medium or long term):
  - Short term: 1-3 years
  - Medium term: 4-6 years (this strategy cycle)
  - Long term: 6-10 years (beyond the LFRMS period).

3.5.2. **Table 3-2** sets out the key to effects and significance that will be used within the assessment.

Table 3-2 – Key to Effects and Significance

Effect Significance	Key
Potential for significant positive effects	++
Potential for minor positive effects	+
Potential for minor negative effects	-
Potential for significant negative effects	--
Uncertain effects – Uncertain or insufficient information on which to determine the appraisal at this stage	?
Potential for both positive and negative effects	+/-
Negligible / No effect	0
Magnitude (High, Medium or Low)	H / M / L
Nature of effect (direct / indirect).	D / I

Effect Significance	Key
Spatial Extent (local – borough wide / regional – South Wales / national - Wales)	L / R / N
Reversibility of effect (reversible / irreversible)	R / I
Permanence (Permanent / Temporary)	P / T
Duration (short / medium / long term).	ST / MT / LT

3.5.3. It should be noted that where uncertain and negligible effects have been identified, it has not been possible to determine the nature of effect, the spatial extent, the reversibility or the duration of effect. In this instance, these cells have been left blank.

3.6 Cumulative Effects

3.6.1. The SEA Regulations require that cumulative effects are considered when identifying likely significant effects. Therefore, a number of plans and policies (local, regional and national) have been reviewed for potential cumulative effects in addition to potential cumulative effects that could occur alongside the implementation of the draft LFRMS.

3.6.2. In addition, the assessment of sites has considered the cumulative effects of neighbouring development sites, including those beyond the borough boundary.

3.6.3. The assessment of cumulative effects has been identified in **Section 9** of this report.

3.7 Mitigation, Enhancement Measures and Monitoring

3.7.1. The SEA Regulations require that mitigation measures are considered to prevent, reduce or offset any significant adverse effects on the environment as a result of implementing the plan. The measures are known as ‘mitigation’ measures.

3.7.2. Mitigation measures have been identified in relation to the assessment of policies, place visions, site allocations and site alternatives. These include both proactive avoidance of adverse effects and actions taken after potential effects have been identified. These are set out in **Section 10** of this report.

3.7.3. **Section 10** also includes enhancement measures, which aim to optimise positive impacts and enhance sustainability. The mechanism for delivery will ensure the promotion, prevention, reduction and offset of any significant adverse effects or enhancement opportunities on the environment.

3.7.4. The SEA Regulations also require that monitoring is undertaken on a plan so that the significant effects of implementation can be identified, and remedial action imposed. The

purpose of the monitoring is to provide an important measure of the sustainability outcome of the final strategy, and to measure the performance of the plan against sustainability objectives and targets. Monitoring is also used to manage uncertainty, improve knowledge, enhance transparency and accountability, and to manage sustainability information.

3.8 Assumptions and Limitations

3.8.1. The preparation of the LFRMS alongside the SEA has allowed an iterative process of assessment and refinement in the narrative and policies within the Plan. Therefore, some of the recommendations set out in this report may already have been addressed in the LFRMS.

3.8.2. The assessment of objectives and measures have been undertaken as a desk-based exercise using the baseline information from the Scoping Report. No site visits have been undertaken specifically for the purposes of the SEA.

3.8.3. WSP have ensured that effects are predicted accurately; however, this can be challenging given limited understanding of precisely how the strategy will be implemented. Given uncertainties there is inevitably a need to make some assumptions, however, these are made carefully and explained in detail within the assessment text.

3.8.4. In some instances, given reasonable assumptions, it is not possible to predict ‘significant effects’, but it is possible to comment on the potential positive and negative effects of the draft plan and its alternatives in more general terms.

4 Identification of Issues, Opportunities and SEA Objectives

4.1 Introduction

4.1.1. This section sets out the sustainability issues and opportunities for the LFRMS and the SEA Appraisal Framework, against which the Local Plan has been assessed.

4.1.2. A Scoping Report, in support of the emerging LFRMS, was produced by WSP in August 2024, which initiated the SEA process (see **Table 3-1**). This report reviewed relevant legislation, plans, and programmes baseline, identified baseline information as well as key issues and opportunities for the Local Plan and identified an assessment framework. The review of plans policies and programmes can be found in **Appendix B** and the full baseline is recorded in **Appendix B**.

4.1.3. This report will be consulted on with the Statutory Consultees (Natural England, Environment Agency, and Historic England). The baseline information used within the SEA Scoping Report is set out in **Appendix B**. It should be noted that, due to the tight timescales, not all comments have been received at the time of writing, but scoping comments will be considered within the final SEA, following consultation on the LFRMS and this Environmental Report. Those responses received, have been set out in **Appendix A**.

4.2 Review of Plans Policies and Programmes

4.2.1. A plan may be influenced in various ways by other plans, policies or programmes, or by external environmental protection objectives such as those laid down in policies or legislation. These relationships enable the Responsible Authority to take advantage of potential synergies and to deal with any inconsistencies and constraints.

4.2.2. The Scoping Report undertook an initial review of policies, plans, programmes, strategies and initiatives that may have an impact on the preparation of relevant policies being reviewed as part of the LFRMS update. This review has informed both the development of the LFRMS and the SEA framework.

4.2.3. Full details on the review of plans, policies and programmes is set out in **Appendix B**.

4.3 Sustainability Issues and Opportunities

4.3.1. The Scoping Report set out a number of issues and opportunities for the LFRMS, for each of the SEA topics scoped into the outlined in the Scoping Report. Those topics scoped into the SEA have been outlined in **Table 4-1** below.

Table 4-1 - Scope of SEA

SEA Topic	Scoped In?	Reasoning
Population and Equalities	In	There is potential for both positive and negative effects on population and equalities and human health as a result of the LFRMS. Due to the overlapping nature of these topics with regards to flood risk, it is proposed that one SEA objective will cover both topics.
Human Health	In	
Economy	In	The LFRMS has potential to have significant impact on local business and the local economy so this is scoped in.
Biodiversity	In	There is potential for both positive and negative effects on biodiversity as a result of the LFRMS.
Landscape and Townscape	In	There is potential for both positive and negative effects on landscape and townscape as a result of the LFRMS.
Historic Environment	In	There is potential for both positive and negative effects on the historic environment as a result of the LFRMS.
Water Environment	In	There is potential for both positive and negative effects on the water environment as a result of the LFRMS.
Air Quality and Greenhouse Gas Emissions	Out	The LFRMS is unlikely to have a significant impact on air quality and greenhouse gas emissions so this is scoped out.
Climatic Factors	In	There is potential for both positive and negative effects on climatic factors as a result of the LFRMS.

SEA Topic	Scoped In?	Reasoning
Material Assets	In	There is potential for both positive and negative effects on material assets as a result of the LFRMS.

4.3.2. The key issues and opportunities for each of these topics have been summarised in **Table 4-2** below.

Table 4-2 – Key Issues and Opportunities

SEA Topic	Issues and Opportunities
Population and Equalities	▪ There is anticipated to be a population growth by 2030. ▪ With an increasing ageing population in WCC, there is likely to be an increase in vulnerable members of the population who may be less able to adapt to a flood event. ▪ There are opportunities to reduce and manage flood risk for the elderly and rural communities. ▪ There is often an inequality in terms of social deprivation and flood risk exposure from all sources of flooding. ▪ The Local Strategy should aim to reduce and manage flood risk. ▪ Development will need to support future demographic changes.
Human Health	▪ The population of WCC is expected to continue to increase which may place additional strain on services and infrastructure. ▪ The main immediate health risks of flooding include physical injury, or an increased risk of developing skin or gut infections through contact with contaminated food water. Longer-term effects can include mental health problems and chest problems due to exposure to mould and damp ▪ There are a variety of secondary stressors that flooding can introduce on individuals. ▪ There are large disparities for life expectancy between the most and least deprived areas. ▪ The LFRMS should ensure that the flood prevention measures meet the demands and needs of the future population. ▪ The LFRMS needs to balance the costs and benefits of flood defences.
Economy	▪ The employment rate has increased, and the economic activity rate has decreased, indicating economic growth. ▪ There is the potential for increased strain to support non-working age people as the population of those aged 65 and over increases. ▪ There is opportunity to support the growing economy and achieve WBC's economic objectives 2023-2026, particularly in the aftermath of the pandemic, by protecting local businesses from flooding.

SEA Topic	Issues and Opportunities
	▪ The LFRMS should reduce and manage flood risk on local businesses.
Biodiversity	▪ Climate change and reduced water quality will put strains on terrestrial and aquatic ecosystems. ▪ Given that ecosystem services are the benefits that nature provides to people, areas of high (potential) provision are often the green and blue spaces close to centres of population, as well as connecting habitats that link these with more remote designated habitats and landscapes. ▪ There is a need to working towards halting the decline in species abundance by 2030, and then increase abundance by at least 10% to exceed 2022 levels by 2042. ▪ The LFRMS should consider the severity of the current environment and biodiversity baseline of all parts of society and place emphasis on improving current water quality and future biodiversity in WCC. ▪ The LFRMS will need to adhere to WCC's future biodiversity goals and mitigate any potential impacts on habitats leading to biodiversity loss.
Landscape and Townscape	▪ Climate change may have an impact on landscape features such as drying out reservoirs, reducing the volume of water in rivers and increasing the frequency and intensity of flood events. ▪ The expected population growth will be driving the need for additional homes and facilities. ▪ The LFRMS will need to ensure that it protects WCC's unique landscape and townscape.
Historic Environment	▪ Future growth and development have the potential to affect the survival, fabric, condition and setting of cultural heritage assets (both above and below ground). ▪ An increase in rainfall, extreme weather events and flooding may result in irreplaceable damage, degradation and/or erosion of heritage and archaeological sites. ▪ The LFRMS should promote the management and maintenance of historic and cultural assets and improve the climate resilience of cultural sites, ensuring the maintenance of distinctive characteristics. ▪ The LFMS should aim to enhance the understanding and appreciation of the significance of heritage assets.
Water Environment	▪ The effects from climate change on increased flooding and drought on WCC's water sources. ▪ Potential for the use of groundwater sources, which could affect nearby receptors that are dependent upon groundwater, including groundwater dependent terrestrial ecosystems, watercourses, and existing groundwater abstractions.

SEA Topic	Issues and Opportunities
	■ Reduced water quality could have significant adverse effects on dependant ecosystems. ■ The physical and chemical quality of water resources is an important aspect of the natural environment and can be adversely affected by pollution associated with surface water runoff from new or existing transport infrastructure, as well as by changes to waterbodies which can affect their quality as a habitat. ■ The LFRMS should seek to incorporate mitigation strategies such as sustainable urban drainage systems (SUDs) and green infrastructure (GI) in order to adapt to climate change and counteract flood risk. GI can also reduce surface water runoff and have water quality co-benefits.
Climatic Factors	■ The risk from greater flood events remains a key climate risk in Westminster with a greater risk from future predicted heavy precipitation within the winter months. ■ The extent of future climate change will be strongly affected by the amount of greenhouse gases emitted. ■ The risk of future flooding events will cause significant damage. ■ Future precipitation changes will have significant impacts on human health and wellbeing and the natural capital in Westminster. ■ The LFRMS needs to protect against current and future climatic flooding. ■ The Strategy will need to plan for and implement/facilitate climate change adaptation, in respect of rising temperatures and extreme weather events, particularly heavy rainfall/flooding and heat to maximise resilience.
Material Assets	■ There is a need to minimise the consumption of resources, including energy and material assets. ■ Future climate change and increases in precipitation will likely result in increased risk to the built environment, and infrastructure assets and systems. ■ New and existing developments must understand and manage current and future climate risks and aim to embed resilience measures in future infrastructure development. ■ There is a need to minimise the potential impact of flooding on transport and other critical infrastructure, both at present and in the future. ■ The LFRMS should aim to protect, upgrade and maintain existing flood and water management infrastructure. ■ The LFRMS should aim to increase adaptation and resilience measures (including both engineering solutions and new smarter technologies), which are likely to be needed to keep the surface transport systems and major infrastructure running efficiently.

4.4 SEA Appraisal Framework

4.4.1. The SEA Appraisal Framework objectives provided in **Table 4-3** relate solely to SEA issues 'scoped in' to the assessment (refer to **Table 4-2**). The SEA objectives and associated indicators have been derived from the baseline data, issues and opportunities and the review of other relevant plans, policies and programmes.

Table 4-3 - SEA Framework

SEA Topic	SEA Objective	Supporting Appraisal Questions
Population Equalities and Human Health	**SEA1:** To increase and enhance flood protection to meet both the current and future demographic changes and protect and enhance human health, quality of life and wellbeing.	Will the policy/ intervention… ■ Support future population growth? ■ Protect and enhance recreational amenity and public access? ■ Will avoid negative effects on human health or quality of life, e.g. noise and air pollution? ■ Support community engagement initiatives? ■ Reduce levels of distress caused by flooding? ■ Reduce levels of inequalities in terms of exposure to flooding?
Economy	**SEA2:** To increase levels of flood protection and resilience for local businesses and the local economy.	Will the policy/ intervention… ■ Provide greater protection to businesses and owners? ■ Reduce economic damage?
Biodiversity	**SEA3:** To protect and enhance protected habitats, species and valuable ecological networks that contribute to ecosystem functionality, contributing to biodiversity net gain.	Will the policy/ intervention… ■ Cause damage to locally, nationally and internationally designated sites? ■ Maintain and enhance biodiversity? ■ Seek opportunities for biodiversity net gain? ■ Prevent fragmentation of habitats and promote ecological networks? ■ Result in developments which will improve biodiversity on site?

SEA Topic	SEA Objective	Supporting Appraisal Questions
		▪ Reduce the spread of INNS?
Landscape and Townscape	**SEA4:** To protect and enhance WCC's townscapes and landscapes.	Will the policy/ intervention… ▪ Respect, maintain and strengthen local character and distinctiveness? ▪ Achieve high quality sustainable design? ▪ Improve the quality and condition of the townscape and landscape? ▪ Respect protected Strategic and Local Views?
Historic Environment	**SEA5:** To protect and enhance the historic environment, including heritage assets (designated and non-designated) and their contribution made by setting, of the historic environment and its component heritage assets.	Will the policy/ intervention… ▪ Conserve and/or enhance heritage assets, their contribution made by setting, of the historic environment and its component heritage assets? ▪ Respect, maintain and strengthen local character and distinctiveness? ▪ Provide protection to heritage assets from the impacts of flooding.
Water Environment	**SEA6:** To maintain and enhance the quality of surface and groundwater.	Will the policy/ intervention… ▪ Support the protection and enhancement of water bodies? ▪ Affect WFD compliance?
Climatic Factors	**SEA7:** Ensure that infrastructure is resilient to the effects of climate change and supports low carbon energy efficient design. **SEA8:** To reduce the risk and vulnerability to flooding.	Will the policy/ intervention… ▪ Affect the resilience of assets and infrastructure to climate change? ▪ Increase levels of embodied carbon? ▪ Reduce the risk of flooding

SEA Topic	SEA Objective	Supporting Appraisal Questions
Material Assets	**SEA9:** Minimise the potential impact of flooding to transport and other critical infrastructure, both at present and in the future. **SEA10:** To maintain and protect soil quality particularly within green spaces and WCC's Royal Parks	Will the policy/ intervention… ■ Support the use of sustainable materials? ■ Make use of existing infrastructure? ■ Will it protect, maintain and enhance the health and function of soils?

5 Compatibility Assessment LFRMS Objectives

5.1 Introduction

5.1.1. This section assesses the compatibility of the Objectives against the SEA Appraisal Framework objectives.

5.1.2. The Objectives have been individually tested against the SEA Appraisal Framework objectives to identify both potential synergies and inconsistencies. This information can help in developing and refining the objectives of the LFRMS.

5.1.3. **Table 5-1** below sets out the key to appraisal, whilst **Table 5-2** overleaf sets out the findings of the compatibility testing of the LFRMS objectives.

Table 5-1 – Key to Compatibility Assessment

Effect	Key
Compatible	✓
Incompatible/ potential conflict	x
No relationship	0
Uncertain relationship	?

5.1.4. The objectives of the LFRMS are as follows:

- **Objective 1:** To better understand and explain the level of local flood risk affecting Westminster with partners, businesses and communities;
- **Objective 2:** To develop holistic, integrated, multi-beneficial and sustainable approaches to flood risk management in Westminster;
- **Objective 3:** To promote and ensure preparedness, resilience and recovery to local flood risk with partners, businesses and communities;
- **Objective 4:** To ensure all development takes an integrated approach to flood risk management, ensuring it is sustainable and delivers improvements; and
- **Objective 5:** To adopt and implement a collaborative approach to flood risk management in Westminster with partners, businesses, and communities.

5.2 Compatibility Assessment Findings

5.2.1. **Table 5-2** overleaf shows the compatibility assessment of LFRMS objectives against the SEA objectives.

Table 5-2 - Compatibility Assessment

Objective	SEA1: Population and Human Health	SEA2: Economy	SEA3: Biodiversity	SEA4: Landscape and Townscape	SEA5: Historic Environment	SEA6: Water Environment	SEA7: Climate Change	SEA8: Flood Risk	SEA9: Transport and Critical	SEA10: Soils
Objective 1: To better understand and explain the level of local flood risk affecting Westminster with partners, businesses and communities	✓	✓	0	✓	0	0	✓	✓	✓	0
Objective 2: To develop holistic, integrated, multi-beneficial and sustainable approaches to flood risk management in Westminster	✓	✓	?	?	?	✓	0	✓	✓	?
Objective 3: To promote and ensure preparedness, resilience and recovery to local flood risk with partners, businesses and communities	✓	✓	0	✓	0	✓	✓	✓	✓	0
Objective 4: To ensure all development takes an integrated approach to flood risk management, ensuring it is sustainable and delivers improvements	✓	✓	?	?	?	✓	✓	✓	✓	?
Objective 5: To adopt and implement a collaborative approach to flood risk management in Westminster with partners, businesses, and communities.	✓	✓	0	✓	?	✓	0	✓	✓	0

5.2.2. **Table 5-2** above shows that none of the objectives have resulted in any incompatible findings. Understandably, SEA8 (flood risk) was the most compatible, showing alignment with all proposed objectives. Similarly, due to the protection offered from flooding and the cross-cutting nature of flood risk, SEA1 (population and human health) has been deemed to be compatible with all LFRMS objectives.

5.2.3. SEA2 (economy) andSEA9 (transport and critical infrastructure) are also considered to be compatible with all objectives, as they will increase understanding, preparedness and resilience, which is likely to offer greater protection to both businesses (and business owners) as well as critical infrastructure.

5.2.4. Objective 3 is the most compatible objective against the SEA objectives, demonstrating alignment with the majority of objectives as it will ensure that all aspects of the environment and community will be prepared for protected from flood risk.

5.2.5. Objectives 1, 3, and 4 are all considered to be compatible with SEA7 (climate change) as these objectives include understanding flood risk within Westminster, and future flood risk, ensuring resilience to any exacerbation flood risk as a result of climate change.

5.2.6. Objectives 1, 3 and 5 are considered to be compatible with SEA4 (landscape and townscape) as a result of working with partners to improve resilience, indirectly preserving and enhancing the Borough's parks and open spaces.

5.2.7. SEA6 (water environment) is considered to be compatible with objectives 2, 3, 4 and 5 through the reduction in flood risk from increased resilience measures and working with partners, indirectly improving water quality.

5.2.8. However, due to the high-level nature of these objectives, it is not clear whether these will support infrastructure, which could result in the loss of land and/or the degradation of the landscape and townscape character, the historic environment, or biodiversity. Due to this, uncertain effects have been identified for landscape and townscape (SEA4), historic environment (SEA5), biodiversity (SEA3), and soils (SEA10).

6 Assessment of LFRMS

6.1 Introduction

6.1.1. The assessment of the LFRMS measures and actions are summarised below and presented in full in **Appendix C.** A matrix approach has been used for the assessment which has used the significance criteria identified in **Table 6-1** below.

6.1.2. **Table 6-2** overleaf provides an overview on the performance of the LFRMS measures and actions against each SEA objective and **Table 6-3** outlines significant effects based on each SEA objective. For the purpose of the SEA, significant effects are deemed to be the following:

- Significant Positive effects;
- Significant Negative effects; and
- Uncertain effects.

6.1.3. Further details on the insignificant effects i.e., minor positive, minor negative, mixed and neutral effects are detailed in **Appendix C**. The Appendix also sets out the nature of effects such as magnitude, spatial extent and duration.

Table 6-1 – Significance of Effect

Effect Significance	Key
Potential for significant positive effects	++
Potential for minor positive effects	+
Potential for minor negative effects	-
Potential for significant negative effects	--
Uncertain effects – Uncertain or insufficient information on which to determine the appraisal at this stage	?
Potential for both positive and negative effects	+/-
Negligible / No effect	0

6.2 Summary of LFRMS Measures and Actions Assessment Findings

6.2.1. Table 6-2 below sets out the overview of effects from the assessment of measures and actions.

Table 6-2 - Summary of Effects - LFRMS Measures and Actions

Measure	Action	SEA1: Population and Human Health	SEA2: Economy	SEA3: Biodiversity	SEA4: Landscape and Townscape	SEA5: Historic Environment	SEA6: Water Environment	SEA7: Climate Change	SEA8: Flood Risk	SEA9: Transport and Critical Infrastructure	SEA10: Soils
Objective 1											
1.1 Create an integrated record of historic flooding and sources of flood risk in Westminster through data collection.	1.1.1 Develop and maintain a central GIS database of flood risk from all sources and historic flooding, and flood management assets in Westminster.	+	+	0	0	+	0	+	+	+	0
	1.1.2 Collect tangible data on areas at risk, historic events, and flood management assets by engaging with internal departments, risk management authorities, landowners and asset owners.										
	1.1.3 Collect tangible data on historic flood events from community groups through direct engagement.										
	1.1.4 Actively engage with community groups after major storms to record relevant impacts.										
	1.1.5 Develop an online mapping platform for flood sources, assets and upcoming FRM projects.										
1.2 Quantify, visualise and communicate risk to understand the exposure to risk and the cost that this may incur to businesses, residents and communities.	1.2.1 Develop written and / or digital materials which help visualise risk and quantify potential costs, both financial and to well being.	+	+	0	+	0	+	0	++	+	0
	1.2.2 Promote materials produced to quantify risk to communities and partners through and engagement plan.										
1.3 Engage with local forums, residents associations, communities, businesses and social	1.3.1 Create an educational data hub for flood risk safety, featuring videos and infographics.	+	+	0	0	0	0	0	+	0	0
	1.3.2 Update the website to signpost communities and residents to the appropriate resources and actions to take.										

Measure	Action	SEA1: Population and Human Health	SEA2: Economy	SEA3: Biodiversity	SEA4: Landscape and Townscape	SEA5: Historic Environment	SEA6: Water Environment	SEA7: Climate Change	SEA8: Flood Risk	SEA9: Transport and Critical Infrastructure	SEA10: Soils
enterprise to provide further information in relation to flood risk management.	1.3.2 Create a targeted community engagement strategy and circulate internally and externally.										
	1.3.3 Provide education for short term residents / lettings about flood risk in Westminster, through information pamphlets and periodic review.										
	1.3.4 Regularly attend local neighbourhood forums, resident associations, business groups in the communities and community group events to discuss flood risk issues. Minimum of three per year.										
1.4 Promote a better understanding of flood risk with partners through information sharing and engage in stronger collaboration efforts.	1.4.1 Improve collaboration between Westminster and Thames Water to share knowledge, including upcoming schemes and strategies through a quarterly check in.	+	0	?	+	0	+	?	+	+	+
	1.4.2 Collaborate with the London Fire Brigade annually at their community open days to provide information on flood risk, to deliver an integrated information service.										
	1.4.3 Collaborate with schools to develop a flood risk program to educate and improve flood risk knowledge in partnership with neighbouring boroughs and organisations.										
Objective 2											
2.1 Increase opportunities for biodiversity, ecosystem services or urban greening to complement water management in Westminster.	2.1.1 Clearly identify targets and opportunities for biodiversity enhancement in Westminster.	+	0	++	+	?	+	+	+	0	+
	2.1.2 Produce a 'developer guide' on achieving multiple benefits within a development scheme.										
2.2 Continue to implement public realm SuDS with	2.2.1 Engage with Westminster internal teams to develop the integration of SuDS into Westminster owned properties.	++	+	+	+	+/-	++	++	++	+	+/-

Measure	Action	SEA1: Population and Human Health	SEA2: Economy	SEA3: Biodiversity	SEA4: Landscape and Townscape	SEA5: Historic Environment	SEA6: Water Environment	SEA7: Climate Change	SEA8: Flood Risk	SEA9: Transport and Critical Infrastructure	SEA10: Soils
target to attenuate 15% of water above the surface for a 1:30yr event (3.33% AEP) from the SuDS Catchments by 2030.	2.2.2 Develop standard details for different SuDS elements for easy integration into Westminster's public realm and highways schemes.										
	2.2.3 Provide design advice for ongoing public realm and highways schemes.										
	2.2.4 Develop SuDS masterplan for the SuDS Catchments, to identify potential areas within Westminster which would be suitable for SuDS and provide flood risk and wider benefits.										
	2.2.5 Retrofit SuDS within the identified SuDS Catchments.										
	2.2.6 Establish requirement for all major planning applications to submit a verification report detailing SuDS installed and storage volumes.										
	2.2.7 Develop and maintain a GIS database of all SuDS features and storage volumes across Westminster.										
	2.2.8 Develop targeted policy to encourage rainwater harvesting / reuse.										
	2.2.9 Develop innovative solutions to remove Surface Water Runoff from the Thames Water Combined Sewer System including assessing the opportunity to establish a separate surface water sewer in Westminster by 2050.										
	2.2.10 Develop a standardised maintenance and management plan (including estimated costs and maintenance schedules) for SuDS implemented in Westminster's public realm and highways.										
2.3 Connect complimentary internal and London-wide strategies (including the London Surface Water Strategy) to	2.3.1 Engage with Westminster internal teams to highlight the wider benefits of SuDS and an integrated approach.	0	0	+	0	0	+	+	++	++	0
	2.3.2 Review sources of funding with partners on a quarterly basis to identify opportunities for joint benefits.										

Measure	Action	SEA1: Population and Human Health	SEA2: Economy	SEA3: Biodiversity	SEA4: Landscape and Townscape	SEA5: Historic Environment	SEA6: Water Environment	SEA7: Climate Change	SEA8: Flood Risk	SEA9: Transport and Critical Infrastructure	SEA10: Soils
ensure maximised flood risk and wider environmental benefits are realised.	2.3.3 Review internal and external strategies on a quarterly basis for opportunities to collaborate with other internal departments in Westminster and other RMAs.										
	2.3.4 Work with relevant partners and stakeholders to develop a joint Thames Riverside Strategy by 2030 in line with the Thames Estuary 2100 Plan.										
Objective 3											
3.1 Implement a system of identifying, contacting and providing support to residents before, during and after flood events by 2026.	3.1.1 Identify residents that are at risk of surface water flooding and provide them with detailed information for support during a flood event.	++	+	0	0	0	0	0	+	+	0
	3.1.2 Update the WCC website to include a dashboard of all extreme weather events, flood risk and a virtual warning system.										
	3.1.3 Utilise social media to issue flood alerts and warnings during flood events.										
	3.1.4 Develop text warning system that can be signed up to for severe weather.										
	3.1.5 Provide support to most affected communities after a flood event through personal contact and online information.										
3.2 Improve resilience and recovery amongst partners, businesses and communities.	3.2.1 Provide information on WCC website for improving property resilience and preparing for flooding.	+/-	+	0	+/-	+/-	0	+	+	0	+
	3.2.2 Provide information on WCC website for recovery after a flood event.										
	3.2.3 Work with Thames Water to understand how they would prefer flood events to be reported and communicate this to businesses and communities.										
	3.2.4 Carry out Section 19 investigations within 4 weeks following a flood events that triggers the S19 threshold.										

Measure	Action	SEA1: Population and Human Health	SEA2: Economy	SEA3: Biodiversity	SEA4: Landscape and Townscape	SEA5: Historic Environment	SEA6: Water Environment	SEA7: Climate Change	SEA8: Flood Risk	SEA9: Transport and Critical Infrastructure	SEA10: Soils
Objective 4											
4.1 Streamline local planning guidance and clarify necessary documentation for all developments by 2025.	4.1.2 Update the WCC website regularly with the relevant planning guidance and documents. This includes developer checklists, updating and keeping the SFRA under review.	+	0	0	0	0	0	0	+	0	0
	4.1.3 Keep a database of new incoming planning applications for basement developments to provide an indication of where there is a lot of basement development coming forward.										
	4.1.4 Ensure the GLA GIS database of basements is up to date.										
4.2 Ensure all new developments consider SuDS, with preference to above ground SuDS by 2025.	4.2.1 Update planning guidance for developers to ensure that flood risk and SuDS are considered in all new developments, with preference for above ground SuDS.	++	+	+/-	+	+	++	++	++	+	+/-
Objective 5											
5.1 Engage in regional networks for sharing of knowledge and best practice.	5.1.1 Regular attendance (quarterly) at the Central London North Flood Risk Partnership Group and LoDEG.	0	0	0	0	0	0	0	+	0	0
	5.1.2 Disseminate regional updates internally on a regular basis through LLFA meetings and email.										
5.2 Work with other RMAs and risk management stakeholders to engage communities.	5.2.1 Ensure pertinent information from local neighbourhood forums is disseminated to Westminster stakeholders.	+	+	0	0	0	+	0	+	+	0
	5.2.2 WCC will Jointly attend at least two public events in local communities per year with other RMAs.										
5.3 Encourage the involvement of communities and businesses in Flood Risk Management.	5.3.1 Identify opportunities for joint funded community resilience projects. Review on a quarterly basis.	++	++	0	0	0	0	+	++	0	0
	5.3.2 Engage with community groups about upcoming FRM schemes and their areas of concern through attendance of their meetings and specific engagement events.										

Measure	Action	SEA1: Population and Human Health	SEA2: Economy	SEA3: Biodiversity	SEA4: Landscape and Townscape	SEA5: Historic Environment	SEA6: Water Environment	SEA7: Climate Change	SEA8: Flood Risk	SEA9: Transport and Critical Infrastructure	SEA10: Soils
	5.3.3. Support and promote the establishment of community flood wardens in the most at risk areas.										
	5.3.3 Establish an online system for reporting flood incidents in Westminster.										

Table 6-3 - Assessment of Measures and Actions - Summary of Significant Effect Findings

SEA Objective	Number of Significant Effects			Summary of Significant Effects
	++	--	?	
SEA1: Population and Human Health	4	0	0	The majority of actions have resulted in minor positive effects on population and human health. This has been detailed in full in **Appendix C**. Significant positive effects have been identified for actions associated with four packages of measures and actions. These have been identified where actions support community engagement and build flood resilience, reducing the number of people in Westminster affected by flooding and reducing levels of distress by flooding, including reducing flood inequalities for vulnerable households.
SEA2: Economy	1	0	0	The majority of actions have resulted in minor positive effects on economy. This has been detailed in full in **Appendix C**. Significant positive effects have been identified for actions associated with measure 5.3 and associated actions. These have been identified where actions engage businesses and result in community resilience to flooding, protecting businesses and reducing economic damage during flood events.
SEA3: Biodiversity	1	0	1	Measure 2.1 has resulted in significant positive effects on biodiversity. The measure is likely to enhance biodiversity within Westminster, encouraging new species and habitats and having benefits to both biodiversity and ecosystem services. One measure and its actions have resulted in uncertain effects upon biodiversity. This has been identified where there is potential for indirect effects upon biodiversity, but this is dependent on the nature of developments that may arise as a result of these measures.
SEA4: Landscape and Townscape	0	0	0	No significant effects have been identified for landscape and townscape. The majority of effects have been identified as negligible or minor positive. The full details of assessments can be found in **Appendix C**.
SEA5: Historic Environment	0	0	1	The majority of measures have resulted in negligible effects upon historic environment. Uncertain effects have been identified for one measure and actions (2.1). This has been identified where there is potential for development that may affect local heritage assets and their settings, depending on the location of developments that may come forward, however this is currently unknown.
SEA6: Water Environment	2	0	0	Two measures and associated actions (2.2 and 4.2) have resulted in significant positive effects. These measures are anticipated to result in significant improvements to water quality as a result of reduced surface run-off and increased attenuation. This is likely to control the level of pollutants within Westminster's water bodies during heavy rainfall and flood events. Additionally, these measures contribute to reducing the quantity of sewage released into the River Thames during heavy rain.
SEA7: Climate Change	2	0	1	Two packages of actions have resulted in significant positive effects on climate change, these are actions associated with measure 2.2 and associated actions and measure 4.2 and associated action. The implementation of SuDS is anticipated to contribute to improving the climate resilience of the Borough, increasing the resilience to heavy rainfall events. Additionally, SuDS can contribute to reduction or sequestration of carbon. Action 2.2.8 also contributes to improve water efficiency in the Borough, reducing the need to water from reservoirs. This is beneficial during drought events, which are likely to be exacerbated by climate change.

SEA Objective	Number of Significant Effects			Summary of Significant Effects
	++	--	?	
				Uncertain effects have been identified for actions associated with measure 1.4 and associated actions. These effects have been determined where there is potential for improvements to climate resilience, but this is to be determined by the implementation of developments by partners and it is unclear if this will occur.
SEA8: Flood Risk	5	0	0	The majority of measures have resulted in minor positive effects for flood risk, which can be found in **Appendix C**. Five significant positive effects have been identified for measures that contribute to reducing the flood risk within Westminster and resulting in improved resilience to flooding, reducing the effects of flood events in the future.
SEA9: Transport and Critical Infrastructure	1	0	0	The majority of measures and action groups have resulted in minor positive effects on transport and critical infrastructure, which is detailed in full in **Appendix C**. Significant positive effects have been identified for one measure and action package (2.3). This measure and actions is anticipated to result in a more joined up approach and greater capacity to flood risk management, ensuring that WCC works together to reduce flood risk across the Borough, and offering greater protection of the Borough's critical infrastructure.
SEA10: Soils	0	0	0	No significant effects have been identified for soils. The majority of effects have been identified as negligible. The full details of assessments can be found in **Appendix C**.

7 Assessment of Alternatives

7.1 Introduction

The SEA Regulations require an assessment of the plan and its “reasonable alternatives”, in addition to those proposed within the draft LFRMS. Without this, there cannot be a proper environmental evaluation of the preferred plan. The assessment of reasonable alternatives does not need to include all possible alternatives, but only those that are realistic.

7.1.1. The development of the LFRMS Measures has not at this stage identified any key policy alternatives, so the assessment of alternatives has assessed a ‘do nothing’ scenario which is the continuation of the existing LFRMS.

7.2 Assessment of Alternative LFRMS Measures

7.2.1. The main assessment has been outlined in **Table 7-1** overleaf. Overall, the existing strategy has performed similarly to the proposed LFRMS, as many of the objectives and measures overlap and ultimately will ensure flood protection. Significant positive effects are likely to remain for SEA1 (population, equalities and health) and SEA8 (flood risk) through the continuation of this strategy.

7.2.2. Where the two strategies differ slightly is through the alignment with the London Plan 2021, the updated Strategic Flood Risk Assessment (SFRA), and developing a better response to the flooding events of 2021. In the previous strategy, there is no objective that proposes the use of flood risk modelling, meaning the measures will not account for the2021 flood events or include up to date information that can inform flood risk planning. .

7.2.3. Additionally, the London Plan 2021 includes policies on both flood risk management and sustainable drainage. Given this plan was adopted in 2021, the existing strategy is not considered to be fully aligned to the plan, whilst the new LFRMS is anticipated to result in improved joining up of flood risk management across London’s Boroughs.

7.2.4. Mixed positive and negative effects have been identified for water (SEA6), due to the potential for increased surface runoff during construction, but the inclusion of SuDS may contribute to improved water quality. Similarly, mixed positive and negative effects have been identified for biodiversity (SEA3), landscape and townscape (SEA4), and historic environment (SEA5). There is no specific objective or measure that addresses flood resilience for these topics and assets. However, the improvement of flood resilience through the implementation of SuDS has potential to enhance the setting of assets and provide green infrastructure benefits.

7.2.5. There is potential for options to result in land take. However, there is potential for the existing strategy to still provide protection to valuable habitats and species through the inclusion of SuDS, hence the potential for both positive and negative effects.

7.2.6. Overall, as the new strategy includes a greater level of detail on the proposed measures, it has more potential to result in a greater number of positive effects on the SEA objectives and is more applicable to the current flooding environment of Westminster, improving the potential for reducing flood risk as a result of the strategy.

Table 7-1 - Assessment of Alternative LFRMS

SEA Objective	Significance of Effects	Application of Existing LFRMS Summary of Effects
SEA1: Population and Human Health	++	The strategy includes objective 2 which aims to take action to reduce social, economic and environmental impacts due to flooding, as well as objective 4 (promoting resilience to flood risk) and objective 5 (collaborate with partners, businesses and residents) that aim to reduce the impacts of flooding on the local population and human health. The strategy supports community engagement throughout its measures and actions to support overall awareness and preparedness to flood risk. The most notable measures that contribute to this are 4A and 1D. Measure 4A, specifically, is anticipated to improve recovery time from flood events, reducing levels of distress amongst the community. However, it should be noted that the existing strategy does not include actions identified following the 2021 flood events. Therefore, there is potential for future flood events to occur in a similar manner and cause damage and distress to homes and residents in Westminster.
SEA2: Economy	+	The strategy includes objective 2 which aims to take action to reduce social, economic and environmental impacts due to flooding, as well as objective 4 (promoting resilience to flood risk) and objective 5 (collaborate with partners, businesses and residents) that aim to reduce the impacts of flooding on the economy and local businesses. These measures support community engagement with businesses and improve resilience. Measure 4A, specifically, is anticipated to improve recovery time from flood events, reducing the cost to businesses.
SEA3: Biodiversity	+/-	There is no measure or action within the existing strategy that focusses specifically on improving biodiversity within Westminster. However, objective 2 focuses on managing flood risk with relation to the natural environment. The implementation of SuDS as a result of other measures may have positive effects on habitats and wildlife, as well as opportunities for biodiversity enhancement. However, there is potential for additional development to arise from the strategy and may result in loss or degradation of biodiversity depending on flood defences that may arise. Additionally, there is no mention of biodiversity net gain.
SEA4: Landscape and Townscape	+/-	There is no measure or action within the existing strategy that focusses specifically on improving landscape and townscape within Westminster. However, objective 2 focuses on managing flood risk with relation to the natural, built and historic environment. The implementation of SuDS measure aims to provide habitats for wildlife in urban areas and opportunities for biodiversity enhancement. This in turn could provide enhancements to the landscape and townscape setting. However, the strategy doesn't recognise the potential implications that flooding can cause to the landscape and townscape setting, in particular the importance of the Royal Parks. The potential development could adversely affect the setting of the landscape and townscape. However, these are to be established by individual developments that may arise.
SEA5: Historic Environment	+/-	There is no measure or action within the existing strategy that focusses specifically on improving historic environment within Westminster. However, objective 2 focuses on managing flood risk with relation to the natural, built and historic environment. The implementation of SuDS measure aims to provide habitats for wildlife in urban areas and opportunities for biodiversity enhancement. This in turn could provide protection to heritage assets and enhancements to the setting of assets. However, the strategy doesn't recognise the potential implications that flooding can cause to the historic environment. The potential development could adversely affect the setting of the landscape and townscape. However, these are to be established by individual developments that may arise.
SEA6: Water Environment	+/-	There is no objective, measure or action within the existing strategy that focusses specifically on improving water quality within Westminster. However, the existing strategy does include an action within Measure 2C that aims to promote SuDS and reduce runoff into the combined sewer system. There are also additional measures and actions within the strategy aimed at improving SuDS. These are however, focussed more on surface water quality rather than groundwater. Whilst the strategy does consider runoff into sewers, the level of action is no longer suitable to the level of sewage output from Thames Water since the strategy was adopted. Since 2020, Thames Water have released approximately 72 billion litres of sewage into the River Thames.

SEA Objective	Significance of Effects	Application of Existing LFRMS Summary of Effects
		Therefore, promoting the retrofit of SuDS does not go far enough to tackle the ongoing, growing issue of runoff in the combined sewer system.
SEA7: Climate Change	+	The strategy will offer resilience to climate change, particularly through the implementation of SuDS. However, there is potential for development of flood defences arising from the strategy to result in higher levels of embodied carbon, although these developments are not detailed. Within measures in objective 2, maintenance will be preferred over total replacement/ construction, which could preserve the existing infrastructure.
SEA8: Flood Risk	++	All objectives and measures aim to reduce the risk of flooding from all sources, increasing the resilience/ decreasing the vulnerability to flooding. However, it should be noted that the existing strategy does not consider flood risk modelling, and is therefore not considering the 2021 flood events. This may increase the risk of flooding if resilience measures are not appropriately located within the Borough.
SEA9: Transport and Critical Infrastructure	+	Overall objective 2 aims to manage flood risk and the risk of harm to the built environment, including the highways network. Measures 2A and 2D focus on maintaining the flood resilience measures of the highways network. There is not any specific measure that deals with the protection of critical infrastructure, other than the highways network, however, it is likely that as all measures aim to reduce the risk of flooding and increase resilience, infrastructure will likely be protected. During the 2021 floods in Westminster, 60 roads were flooded. Following this event, actions to update surface water models, gully maintenance strategies, and strategic retrofitting of SuDS were identified. However, this is not considered within the existing strategy and therefore it is unlikely to suitably enhance the transport network's resilience to flooding.
SEA10: Soils	?	There is potential for the Strategy to influence land drainage for flood risk benefit. The effects this may have on overall soil quality is not clear. It is also not clear if interventions which may come forward would result in the reduction of soil quality within of open spaces, or geologically important sites.

8 Cumulative Assessment

8.1 Introduction

8.1.1. The SEA Regulations require that cumulative effects are considered when identifying likely significant effects. Cumulative effects arise, for instance:

- Where several individual measures have a combined effect on an objective; or
- Where several measures each have insignificant effects but together have a significant effect.

8.1.2. The significance of cumulative effects resulting from a range of activities, or multiple incidences of one activity, may vary based on factors such as the nature of the proposed sites and policies and the sensitivity of the receiving communities and environment.

8.1.3. This section therefore presents the findings of the following:

- Consideration of how different proposed measures within WCC may interact and cause cumulative effects on a receptor (Intra-project effects); and
- How the proposed measures within LFRMS could cause cumulative effects in association with other plans, policies and projects in the surrounding area (Inter-project effects).

8.2 Intra-Project Effects

8.2.1. The SEA assessment of both measures and actions drew out potential intra-project cumulative effects. These have been identified in **Table 8-2** below.

8.2.2. **Table 8-1** below outlines the key to effects for intra-project cumulative effects.

Table 9-1 – Key to Cumulative Effects

Effect	Key
Positive cumulative effect	+
Negative cumulative effects	-
Mixed cumulative effects	+/-
Uncertain cumulative effects	?
No overall cumulative effects	0

Table 9-2 – Intra-Project Effects

SEA Objective	Significance	Summary
SEA1: Population and Human Health	+	The increased level of protection offered across the proposed measures and actions are likely to give rise to cumulative increase in protection offered to current and future populations, as well as reduced distress caused by flooding.
SEA2: Economy	+	The increased level of protection offered across the proposed measures is likely to give rise to cumulative increase in protection offered to current and future businesses and developments.
SEA3: Biodiversity	+/-	Positive cumulative effects are anticipated if multiple developments implement biodiversity net gain, as is promoted by the LFRMS measures. The implementation of SuDS have the potential to give rise to a cumulative increase in the levels of green infrastructure and habitats. The level of infrastructure required to for some actions arising from the LFRMS and the scale of construction is not yet known. If multiple schemes arise within the same time frame, there is potential for a cumulative loss of land and therefore potential habitats (permanent negative effect). Construction activities are also likely to temporarily adversely affect nearby habitats and species through noise, disruption and loss of visual amenity due to the presence of construction plant and activities.
SEA4: Landscape and Townscape	+	Positive cumulative effects are anticipated as a result of increased flood risk management within Westminster's local landscapes, including the Royal Parks and other open spaces. Increasing resilience measures also has potential to improve the setting of local landscape and townscapes. The development of SuDS has the potential to give rise to a cumulative increase in the levels of green infrastructure.
SEA5: Historic Environment	+/-	Multiple measures in combination could provide a cumulative increase in protection to the historic environment. However, the location of infrastructure that may arise is unknown. There is potential for cumulative degradation of the historic environment if multiple insensitively designed schemes were to come forward. Additionally, there is potential for construction works to result in disruption to buried or undiscovered heritage assets.
SEA6: Water Environment	+	The LFRMS has potential for positive cumulative effects on water quality through reduced levels of surface runoff. The implementation of SuDS is likely to result in controlled runoff of surface water during flood and heavy rainfall events, positively affecting water quality. Additionally, there is potential for a reduction in Thames Water releasing raw sewage into the River Thames.
SEA7: Climate Change	+	Increased resilience to flooding will help to ensure that infrastructure is given greater resilience to the effects of climate change. Delivery of multiple schemes and measures may cumulatively increase resilience. Additionally, if multiple SuDS developments were to arise there is potential for improved carbon sequestration.
SEA8: Flood Risk	+	The increased level of protection offered across the proposed measures and actions are likely to give rise to cumulative increase in protection from flood risk across the Borough.
SEA9: Transport and Critical Infrastructure	+	The increased level of protection offered across the proposed measures and actions are likely to give rise to cumulative increase in protection offered to critical and transport infrastructure.
SEA10: Soils	+/-	The level of infrastructure required for some actions arising from the LFRMS. If multiple schemes were to arise, there is potential for a cumulative disruption of soils through earthworks. SuDS solutions have the potential to give rise to a cumulative increase in the levels of protection to soil quality and improving soil drainage.

8.3 Inter-Project Effects

8.3.1. **Table 8-3** below outlines the sources of potential inter-cumulative effects, whilst **Table 8-4** details the cumulative effects identified for each of the SEA Topics in relation to these policies and plans. This uses the same key to effects as set out in **Table 8-1** above.

Table 8-2 - Sources of Inter-Cumulative Effects

Policy or Plan	Plan Details
City of Westminster, Westminster Local Development Scheme 2024 – 2027	The Local Development Scheme provides the local planning policy framework for the area until 2027. It is the basis for land use planning decisions in the Borough.
City of Westminster, City Plan 2019-2040	This Plan, along with the London Plan, is the statutory development plan setting out the vision and strategy for the development of the city, and contains policies that will be used in determining planning applications.
City of Westminster, Climate Change Action Plan 2040	The Climate Emergency Action Plan for Westminster sets out a framework for collective action on climate change to achieve the target of achieving net zero emissions across the borough by 2040.
The London Plan 2021	The London Plan is the Spatial Development Strategy for Greater London and acts as a framework and a vision for the development of London over the next 20-25 years. The London Plan supports major development of London's growth corridors and Opportunity Areas (areas that will see the most significant change), which have the potential to deliver a substantial number of new homes and jobs in London. The Plan also outlines requirements for water management, including flood risk management and resilience within both Opportunity Areas and subsequent developments.
Neighbouring Local Plans and Strategies	Local plans in neighbouring boroughs (Royal Borough of Kensington and Chelsea, London Borough of Camden, and London Borough of Brent) influence cross-boundary development improvements. The plans include: ■ Royal Borough of Kensington and Chelsea, Local Flood Risk Management Strategy; ■ London Borough of Camden, Flood Risk Management Strategy 2022-2027; ■ London Borough of Brent, Flood Risk Management Strategy;

Policy or Plan	Plan Details
	■ Brent Local Plan 2019-2041; ■ Brent Transport Strategy 2015-2035; ■ London Borough of Camden, Draft new Local Plan; ■ Healthy Streets, Healthy Travel, Healthy Lives: Camden Transport Strategy 2019-2041; ■ Royal Borough of Kensington and Chelsea, Local Plan 2024; and ■ Royal Borough of Kensington and Chelsea, Local Implementation Plan 2019.

Table 8-3 - Inter-Project Cumulative Effects Summary

SEA Objective	Westminster Local Development Scheme 2024 – 2027	City Plan 2019-2040	Climate Change Action Plan 2040	The London Plan 2021	Neighbouring Local Plans and Strategies	Summary of Effects
SEA1: Population and Human Health	+	+	+	+	+	There are potential positive cumulative effects due to mitigation measures such as SuDs and ensuring new developments are not within a high flood risk zone, which will help to increase and enhance flood protection. The provision and improvements to the public realm, transport infrastructure and open spaces and carbon reduction plans, will result in positive effects on the health and wellbeing of the population in the region. This is because access to greenspace and active travel options can provide better mental health and wellbeing outcomes including reduced levels of depression, anxiety and enhanced quality of life, as well as helping to bind communities together, reduce loneliness, and mitigate the negative effects of air pollution and excessive noise.
SEA2: Economy	+	+	+	+	+	There is the potential for positive effects on the economy if multiple large-scale developments were to come forward, such as those in opportunity areas. These developments are anticipated to increase levels of flood protection by incorporating permeable surfaces and SuDs.
SEA3: Biodiversity	+/-	+/-	+	+/-	+/-	Potential for cumulative loss, damage or fragmentation of statutory and non-statutory sites and habitats due to the provision of housing developments and transport infrastructure alongside flood protection measures. Although it is assumed that protected species would be mitigated at a project level, there are wider impacts on biodiversity Positive cumulative effects may result through biodiversity net gain over multiple plans in conjunction with the LFRMS. These are likely to be driven by policies where green infrastructure is incorporated in design to increase biodiversity and if biodiversity is lost on site, mitigation measures will improve the quality and management of the rest of the site or deliver off-site compensation of better biodiversity value.
SEA4: Landscape and Townscape	+/-	+/-	+	+/-	+/-	The provision of public realm improvements through the Local Development Plans, Local Plans and transport plans alongside the LFRMS could help to increase and improve the open space offering as well as the setting of the WCC's townscape and landscape. This will result in positive cumulative effects; however, multiple developments could result in a cumulative loss of open spaces.
SEA5: Historic Environment	+	+/-	+	+/-	+	There is the potential for temporary negative cumulative effects on the historic environment from multiple housing developments and transport schemes in Westminster and neighbouring boroughs, alongside the LFRMS. Poor and insensitive design could deteriorate the unique setting WCC's heritage assets. Positive cumulative effects will also result from, improved climate resilience measures are likely to positively effect heritage assets, reducing degradation from flooding.
SEA6: Water Environment	+	+/-	0	+/-	+	There is potential for cumulative increase in impacts on surface water and groundwater, particularly from physical alteration as a result of development. Drainage and water quality measures are likely to be specific to each development. The support of SuDs by these plans, alongside the LFRMS may also contribute to a cumulative improvement in water quality in WCC.

SEA Objective	Westminster Local Development Scheme 2024 – 2027	City Plan 2019-2040	Climate Change Action Plan 2040	The London Plan 2021	Neighbouring Local Plans and Strategies	Summary of Effects
SEA7: Climate Change	+	+	+	+	+	Positive cumulative effects have the potential to result from new and improved developments and infrastructure, from low carbon and energy efficient design, which is resilient to the effects of climate change. Climate change adaptation measures are likely to be specific to each local plan.
SEA8: Flood Risk	+/-	+/-	+	+/-	+/-	The addition of increased use of hard standing surfaces as part of the proposed housing provision and transport developments will increase surface water runoff, therefore, resulting in potential negative effects on flooding. However, the proposed developments are likely to incorporate permeable surfaces and SUDs which will help to reduce flood risk if implemented county-wide. Plans will also ensure to develop away from areas with flood risk.
SEA9: Transport and Critical Infrastructure	+	+	0	+	+	Local development plans will incorporate the use of SuDs to new developments to mitigate flooding and diverting surface water runoff. This would have positive cumulative effects on transport and other critical infrastructure.
SEA10: Soils	+	+/-	0	+/-	+	There are positive cumulative effects as local development plans promote preservation of soils and minerals through re-use and restoration, especially with new developments. The support of SuDs by these plans may also contribute to a cumulative improvement in soil quality. However, there may be temporary negative cumulative effects due to construction and potential land take of new housing and transport developments and infrastructure alongside those developments which may arise from the LFRMS..

9 Mitigation, Enhancement and Monitoring

9.1 Mitigation and Enhancement Measures

9.1.1. Mitigation of significant negative effects of the plan and enhancement of positive effects are a key purpose of SEA. The SEA Regulations require that mitigation measures are considered to prevent, reduce or offset any significant adverse effects on the environment of implementing the plan. The measures are known as ‘mitigation’ measures. Mitigation measures include both proactive avoidance of adverse effects and actions taken after potential effects are identified.

9.1.2. The mitigation measures proposed in **Table 9-1** are designed to avoid or reduce the effects identified as potentially negative through the policy assessments on the SEA Objectives. The table also includes enhancement measures, that aim to optimise positive impacts and enhance sustainability.

Table 9-1 – Mitigation, Enhancement and Monitoring

SEA Objective	Mitigation/ Enhancement	Mechanism
SEA1: Population, equalities and health	Measures should ensure that all groups are reached inclusively and in a timely manner. Consideration should be given to those who may not have access or the knowledge to access the internet and/or a smart phone. Materials should be developed in a non-technical manner and a variety of languages so that a wider range of social groups will be able to understand the information. Engagement should be undertaken in a number of different formats to ensure that all groups can contribute.	Within the LFRMS Scheme level Heath Impact Assessment (HIA) and Equalities Impact Assessment (EqIA)
SEA1: Population, equalities and health SEA2: Economy	Best practice mitigation measures e.g., noise and air quality management, should be implemented to minimise effects during construction on the local population. Active engagement with the local community should be undertaken prior to the commencement of any construction activities.	Construction Environmental Management Plan (CEMP) Community Engagement Plan Scheme level HIA
SEA1: Population, equalities and health	Support provided to residents should be tailored for specific household types and needs, minimising any inequalities as a result of flood events.	Within the LFRMS Community Engagement Plan
SEA1: Population, equalities and health	Flood Wardens should be advertised to inform the public. This advertising should also include contacting those without access to the internet.	Community Engagement Plan
SEA1: Population, equalities and health SEA2: Economy	Resilience and recovery guides should be developed individually to support different types of partners, businesses, and community needs.	Within the LFRMS Community Engagement Plan
SEA1: Population, equalities and health SEA3: Biodiversity	Schemes should incorporate the biodiversity net gain where possible. New developments should present opportunities for new areas of green infrastructure and green space which can be accessed by the local community. Biodiversity targets should exceed mandatory biodiversity net gain of 10% where possible. Biodiversity measures that are implemented should aim to contribute to reducing flood risk where possible, with improved tree planting for drainage measures.	Within the LFRMS Scheme level HIA Scheme level design Project level environmental assessment
SEA3: Biodiversity	SuDS design should adhere to guidance set out within the Mayor of London's (in partnership with the London Wildlife Trust) Urban Greening for Biodiversity Net Gain[11].	Scheme level design

[11] Mayor of London's (in partnership with the London Wildlife Trust) Urban Greening for Biodiversity Net Gain: A Design Guide. 2021 [online] https://www.london.gov.uk/sites/default/files/urban_greening_and_bng_design_guide_march_2021.pdf

SEA Objective	Mitigation/ Enhancement	Mechanism
SEA3: Biodiversity	Opportunity to work with natural processes to manage flood risk and enhance biodiversity and ecosystem resilience through habitat creation, green engineering and natural management techniques.	Within the LFRMS Scheme level design Project level environmental assessment
SEA3: Biodiversity	Scheme design should aim to minimise the environmental effects by 'designing to avoid' potential habitat features that may be of local importance. Habitat loss should be avoided, but where this can't be avoided, habitats will be reinstated upon completion of construction, and compensatory habitat should be considered to replace damaged or lost habitat.	Scheme level design Project level environmental assessment CEMP Biodiversity Management Plan
SEA4: Landscape	Resilience information should include resilience measures that are sensitively designed, as to minimise negative effects on the townscape setting.	Scheme level design Project level environmental assessment
SEA4: Landscape & Townscape SEA5: Historic Environment	Measures should incorporate Construction Industry Research and Information Association's (CIRIA) guidance on SuDS[12] design to ensure high-quality design that will minimise the effects on the historic environment	Scheme level design Project level environmental assessment
SEA4: Landscape & Townscape SEA5: Historic Environment	Developments should be well-designed and screened to ensure that their effects on the local townscape, landscape and historic setting are minimised.	Scheme level design Project level environmental assessment
SEA5: Historic Environment	Careful consideration should be given to the potential presence of heritage assets (particularly buried archaeology) when finalising developments. Where required, a programme of trial trenching and archaeological recording should be undertaken.	Archaeological/ heritage surveys CEMP
SEA6: Water Quality SEA10: Soils	Care should be taken during construction regarding the potential for contaminants such as silt, concrete or fuel oil to pollute water courses via surface run off. All construction activities should be undertaken in accordance with relevant best practice pollution prevention guidance. Pollution Incident Control Management Plans should be developed to limit adverse effects arising from pollution events.	CEMP Pollution Incident Control Management Plan
SEA6: Water Quality SEA10: Soils	Schemes should be designed and carefully located to try and avoid intrusive works such as piling which could mobilise contaminants. Dependent on the nature of proposed flood risk schemes, natural hydromorphological functions could be impacted, resulting in negative effects.	Scheme level design/ optioneering Project level environmental assessment

[12] Construction Industry Research and Information Association (2017) Guidance on the construction of SuDS. Available at: https://www.ciria.org/CIRIA/News/CIRIA_news2/CIRIA_publishes_new_guidance_on_SuDS_construction.aspx

SEA Objective	Mitigation/ Enhancement	Mechanism
SEA10: Soils	Site investigation works (for example, soil permeability tests) should be run to determine the suitability of soils for SuDS.	Scheme level design/ optioneering Project level environmental assessment
SEA7: Climate resilience and energy efficiency	Schemes should incorporate sustainable design measures to reduce overall levels of embodied carbon. The use of renewables for the energy supply during construction and operation will be investigated, as well as the use of materials with lower embodied carbon.	Scheme level design Project level environmental assessment

9.2 Monitoring Measures

9.2.1. The SEA Regulations require that monitoring is undertaken on a plan so that the significant effects of implementation can be identified, and remedial action imposed. The purpose of the monitoring is to provide an important measure of the sustainability outcome of the final plan, and to measure the performance of the plan against sustainability objectives and targets. Monitoring is also used to manage uncertainty, improve knowledge, enhance transparency and accountability, and to manage sustainability information.

9.2.2. The aim of monitoring is to check whether the plan is having the significant effects that were predicted in the SEA, and to deal with any unforeseen problems. Those remaining significant effects (albeit uncertain effects) that remain following the implementation of the mitigation and enhancement measures above include the following:

- **SEA3 (Biodiversity):** Potential loss of and fragmentation of habitats from the construction of flood defence schemes.
- **SEA4 (Landscape and Townscape):** Potential degradation of the landscape and townscape from the construction of flood defence schemes.
- **SEA5 (Historic Environment):** Potential loss of heritage assets (including archaeological remains) and deterioration of the historic setting from the construction of flood defence schemes.
- **SEA6 (Water Quality):** Potential degradation of groundwater quality.

9.2.3. It should be noted that these uncertain effects are generally where limited scheme information is currently available.

9.2.4. Table 10-2 below sets out those monitoring measures which could be suitable in monitoring those uncertain residual effects outlined above. Additional monitoring measures have also been included to monitor the potential significant positive effects of the LFRMS.

9.2.5. WCC will be responsible for undertaking monitoring.

Table 9-2 – Proposed Monitoring Measures

SEA Objective	What could be measured?	Mechanism
SEA3: Biodiversity	The number of new schemes achieving biodiversity net gain. The Urban Greening Factor	Scheme level design Urban Greening Factor Calculator Annual monitoring
SEA4: Landscape and Townscape	Loss or damage to landscape character and features of designated sites.	Scheme level design Annual monitoring

SEA Objective	What could be measured?	Mechanism
	Area of blue and green infrastructure created.	
SEA5: Historic Environment	Number of developments within a conservation area. Number of historic assets (including buried heritage) lost and/or discovered. Number of heritage assets benefiting from flood protection.	Scheme level design Annual monitoring
SEA6: Water quality	WFD water quality.	Scheme level WFD risk assessment
Additional Monitoring Measures		
SEA1: Equalities and Human Health	The number of properties benefiting from flood protection. % increase of green/blue infrastructure.	Scheme level design Annual monitoring
SEA2: Economy and Businesses SEA8: Flood risk SEA9: Critical Infrastructure	The number of properties benefiting from flood protection. The number of businesses benefiting from flood protection. The number of critical infrastructure assets benefiting from flood protection.	Annual monitoring
SEA7: Transport and Critical Infrastructure	Number of schemes that make use of existing infrastructure.	Scheme level design
SEA10: Geology and Soils	% of land that is restored and improved.	Annual monitoring

10 Recommendations

10.1.1. This section sets out the recommendations identified throughout the SEA assessment. It should be noted that these are different from the mitigation measures outlined in **Section 9** above, as they focus on potential changes to the LFRMS, rather than measures identified in response to significant effects.

10.1.2. These changes have been considered by WCC following consultation and have been included as part of the final LFRMS. **Table 10-1** below outlines these recommendations.

Table 10-1 – SEA Recommendations

Item	Recommendation
General	If known, it is recommended that the LFRMS includes the indicative programme of flood risk management schemes and the types of schemes to be delivered.
Objectives	The overarching objectives are lacking in detail, which has resulted in some uncertain effects with the SEA objectives. Providing further details on what the objectives could entail would increase the overall compatibility.
Measure 1.2, Actions 1.2.1, 1.2.2	The actions could be consider including materials of support for those affected financially by flooding.
Measure 1.4 and Action 1.4.1	Action 1.4.1 could consider expanding to include joining up of upcoming schemes and strategies to ensure a cohesive approach to flood risk.
Measure 2.1 and Action 2.1.2	The action of 2.1.2 could consider expanding to include the topics that will be included within the developer guide.
Measure 2.3 and Action 2.3.2, 2.3.4	Both actions 2.3.3. and 2.3.4 could consider expanding their actions to state key areas that will be included within strategies, for example, flood defences, or improving water quality.
Measure 3.3 and Action 3.1.3	Action 3.1.3 could consider expanding to include both social media and phone/text alerts for flood events. It could also extend warnings to transport network providers,
Measure 3.2 and Action 3.2.1	Action 3.2.1 should consider expanding to include additional sources of funding that are available for less affluent communities who may not be able to afford implementing resilience measures without financial aid.

Item	Recommendation
Measure 5.1 and Action 5.1.2	Action 5.1.2 could consider expanding to state which organisations information will be shared with.

11 Next Steps

11.1.1. In accordance with the SEA Regulations, the SEA Report must be made available at the same time as the draft plan or programme, as an integral part of the consultation process, and the relationship between the documents clearly indicated.

11.1.2. WCC will be seeking the views of statutory bodies and other stakeholders on the results of the SEA, in order to ensure that the SEA provided a robust assessment of the LFRMS.

11.1.3. Once the LFRMS is adopted, an SEA Statement will be produced to document this process and will include a record of the comments received on both the LFRMS and SEA Environmental Report, and the actions taken as well as setting out how the SEA has influenced the development of LFRMS.

Appendix A

SEA Assurance Checklist and Consultation Comments

Public

Table A-1 sets out the quality assurance checklist, taken from the Office of the Deputy Prime Minster's Practical Guide to the Strategic Environmental Assessment Directive[13].

Table A-1 - Quality Assurance Checklist

Item	Where this has been addressed
Objectives and Context	
The plan's purpose and objectives are made clear.	Section 2.2 of the Environmental Report sets out the plan's vision and objectives.
Environmental issues and constraints, including international and environmental protection objectives, are considered in developing objectives and targets	Key sustainability issues have been identified through a review of relevant plans and programmes (see Appendix B, Section 4.2 and 4.3) and analysis of baseline conditions (see Appendix B). These have informed the development of the SEA Framework presented in Section 4.4.
SEA objectives, where used, are clearly set out and linked to indicators and targets where appropriate	Section 4 sets out in detail how the SEA framework has been devised.
Links with other related plans, programmes and policies are identified and explained.	A review of plans policies and programmes is set out in Appendix B.

[13] Office of the Deputy Prime Minster's Practical Guide to the Strategic Environmental Assessment Directive, 2005 [online] available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7657/practicalguidesea.pdf

Item	Where this has been addressed
Conflicts that exist between SEA objectives, between SEA and plan objectives and between SEA objectives and other plan objectives are identified and described.	Section 5 tests the compatibility of the SEA framework objectives against the LFRMS draft objectives.
Scoping	
Consultation Bodies are consulted in appropriate ways and at appropriate times on the content and scope of the Environmental Report	The statutory consultees were consulted on the Scoping Report between August and September 2024. It should be noted that, due to the tight timescales, not all comments have been received at the time of writing, but scoping comments will be considered within the final SEA, following consultation on the LFRMS and this Environmental Report.
The assessment focuses on significant issues.	Key sustainability issues have been identified in the baseline analysis contained in Appendix B. Section 4.3 summarises the key sustainability issues identified.
Technical, procedural and other difficulties encountered are discussed; assumptions and uncertainties are made explicit	Section 3.8 discusses the assumptions and limitations encountered.
Reasons are given for eliminating issues from further consideration.	No issues have been knowingly eliminated from the assessment at this stage.
Alternatives	

Item	Where this has been addressed
Alternatives include ‘do minimum’ and/or ‘business as usual’ scenarios wherever relevant.	Section 7.2 assesses the policy alternative, which for this reflected a ‘do minimum scenario’ – Application of the ‘business as usual scenario’ – Application of the existing LFRMS.
The environmental effects (both adverse and beneficial) of each alternative are identified and compared	Alternative measures and actions have both been assessed using the same criteria as the proposed policies and sites. A summary in Section 7.2 is provided that details their performance against the proposed measures and actions.
Inconsistencies between the alternatives and other relevant plans, programmes or policies are identified and explained	Where possible, this has been highlighted within the assessment and detailed in Section 7.2.
Reasons are given for selection or elimination of alternatives.	A summary in Section 2, Section 7.2 is provided that details their performance against the proposed allocations.
Baseline Information	
Relevant aspects of the current state of the environment and their likely evolution without the plan or programme are described.	Appendix B of this SEA Report presents the baseline analysis of the borough’s social, economic and environmental characteristics including their likely evolution without the LFRMS.
Environmental characteristics of areas likely to be significantly affected are described, including areas wider	Section 3.5 sets out the criteria for assessing the spatial extent of effects. This has been further documented throughout the assessment in Appendix C.

Item	Where this has been addressed
than the physical boundary of the plan area where it is likely to be affected by the plan.	
Difficulties such as deficiencies in information or methods are explained.	Section 3.8 discusses the assumptions and limitations encountered.
Prediction and evaluation of likely significant environmental effects	
Effects identified include the types listed in the Directive (biodiversity, population, human health, fauna, flora, soil, water, air, climate factors, material assets, cultural heritage and landscape), as relevant; other likely environmental effects are also covered, as appropriate	Sections 5 and 6 summarise the appraisal of the sustainability performance of the LFRMS. The Objectives, Measures and Action Plan are appraised. Detailed appraisal matrices are also provided at Appendix C.
Both positive and negative effects are considered, and the duration of effects (short, medium or long-term) is addressed.	Positive and negative effects are considered within the appraisal matrices and within Section 6. Potential effects are identified in the short, medium and long-term. The temporal scope for short-, medium- and long-term effects is defined in Section 3.5.
Likely secondary, cumulative and synergistic effects are identified where practicable.	The potential for cumulative and synergistic effects is considered in Section 8. These have also been highlighted within the assessment of LFRMS (Appendix C).
Inter-relationships between effects are considered where practicable.	Inter-relationships between effects are identified in the assessment commentary, where appropriate. These have

Item	Where this has been addressed
	also been assessed as part of the Intra-project cumulative effects.
The prediction and evaluation of effects makes use of relevant accepted standards, regulations, and thresholds	These have been detailed in Appendix B and identified where appropriate within the commentary for assessment.
Methods used to evaluate the effects are described.	These have been detailed in Section 3.5 and Appendix B.
Mitigation Measures	
Measures envisaged to prevent, reduce and offset any significant adverse effects of implementing the plan or programme are indicated.	These have been outlined in Section 9.
Issues to be taken into account in project consents are identified.	These have been outlined in Section 9.
The Environmental Report	
Is clear and concise in its layout and presentation	The SEA Report is clear and concise.
Uses simple, clear language and avoids or explains technical terms	Clear non-technical language has been used throughout.
Uses maps and other illustrations where appropriate.	Figure and tables have been used to present information where appropriate.

Item	Where this has been addressed
Explains the methodology used.	Methodology is set out in Sections 3.3, 3.4, 3.5, 3.6, and 3.7 and the thresholds for assessment are detailed in Appendix D.
Explains who was consulted and what methods of consultation were used.	Section 2.1 sets out the work and consultation undertaken to date. The statutory consultees were consulted on the Scoping Report between August and September 2024. It should be noted that, due to the tight timescales, not all comments have been received at the time of writing, but scoping comments will be considered within the final SEA, following consultation on the LFRMS and this Environmental Report.
Identifies sources of information, including expert judgement and matters of opinion	Section 3.3 and Appendix B identify sources of information used to inform the assessment.
Contains a non-technical summary covering the overall approach to the SEA, the objectives of the plan, the main options considered, and any changes to the plan resulting from the SEA.	A non-technical summary has been included separately.
Consultation	
The SEA is consulted on as an integral part of the plan-making process	The statutory consultees were consulted on the Scoping Report between August and September 2024. This SEA Report will be consulted on alongside the draft LFRMS.

Item	Where this has been addressed
Consultation Bodies and the public likely to be affected by, or having an interest in, the plan or programme are consulted in ways and at times which give them an early and effective opportunity within appropriate time frames to express their opinions on the draft plan and Environmental Report.	This SEA Report will be consulted on alongside the draft LFRMS. This will give opportunities for statutory consultees, stakeholders and members of the public to comment on the findings of the SEA.
Decision-making and information on the decision	
The environmental report and the opinions of those consulted are taken into account in finalising and adopting the plan or programme	Responses received to this SEA Report will be taken into consideration in future iterations of the report.
An explanation is given of how they have been taken into account.	This will be detailed in the post-adoption statement, which will be produced once the LFRMS has been adopted.
Reasons are given for choosing the plan or programme as adopted, in the light of other reasonable alternatives considered.	This will be detailed in the post-adoption statement, which will be produced once the LFRMS has been adopted.
Monitoring measures	
Measures proposed for monitoring are clear, practicable and linked to the indicators and objectives used in the SEA.	Proposed monitoring measures are set out in Section 9.2. This details potential indicators and where possible are linked targets within the draft LFRMS and London Plan.

Item	Where this has been addressed
Monitoring is used, where appropriate, during implementation of the plan or programme to make good deficiencies in baseline information in the SEA.	This will be detailed in the post-adoption statement, which will be produced once the LFRMS has been adopted.
Monitoring enables unforeseen adverse effects to be identified at an early stage. (These effects may include predictions which prove to be incorrect.)	Proposed monitoring measures are set out in Section 9.2. These are proposed for those residual significant effects – in this case these are just uncertain effects.
Proposals are made for action in response to significant adverse effects.	

Table A-2 – Scoping Consultation Comments

Consultee	Date	Comment	How this has been addressed.
Natural England	25th September 2024	Natural England has no specific comments to make on this SEA Scoping Report for the Local Flood Risk Management Strategy for the Westminster City Council.	No Action Required.
Historic England	27th September 2024	We advise that Table A-6 - Relevant Plans, Policies, Strategies and Programmes is updated to include the following: International ■ The Convention for the Protection of the Architectural Heritage of Europe (Granada) 1985. ■ European Landscape Convention (ELC) (Florence) 2000 ■ The Convention on the Protection of Archaeological Heritage (Valletta) 1992 National ■ Ancient Monument and Archaeological Areas Act (1979) ■ Planning (Listed Buildings and Conservation Areas) Act (1990) ■ Historic Buildings and Ancient Monuments Act 1953 (This establishes the basis for the designation of registered parks and gardens and registered battlefields). ■ Hedgerow Regulations 1997 (These identify both historically and naturally important hedgerows). ■ Planning Practice Guidance: Historic Environment	Those listed national plans and policies have been included within Table B-7 in Appendix B. All listed international plans and policies had already been included.
Historic England	27th September 2024	The baseline (Table 5-1) is broadly acceptable but would benefit from restructuring to provide greater clarity. It would be advisable to start by defining the historic environment and its component heritage assets in line with the NPPF and to make	Table B-1 includes an additional paragraph has been added that

Consultee	Date	Comment	How this has been addressed.
		the point that it is a finite and irreplaceable resource. Then explain what designated and non-designated assets comprise the historic environment of Westminster, and then what their value is to the area.	outlines the importance of the historic environment.
Historic England	27th September 2024	Non-designated archaeological should also be mentioned as changes in water saturation can seriously affect their preservation.	Non-designated assets have been included already, but water saturation issues have been identified in Table B-1.
Historic England	27th September 2024	As in the townscape section, it is also worth highlighting that heritage assets are integral to many of the local and protected views in the area. Indeed, Westminster's unique townscape owes much to the historic environment, meaning that effective management of the historic environment is integral to the effective management of townscape and views.	No action required – this has already been included.
Historic England	27th September 2024	The 'Likely Evolution of the Baseline without the LFRMS' section of Table 5-1 is broadly acceptable but should refer to all heritage assets, not just 'local' which could be taken to mean 'non-designated'. It might also be helpful to think about whether the wider benefits of the historic environment would be affected.	Removed 'local'
Historic England	27th September 2024	The final 'Issues, Opportunities and Implications for the LFRMS' section is also broadly acceptable, but the third bullet point should refer to significance as well as, or in place, of distinctive characteristics. It may also be beneficial to add a point on: ■ Harm to/loss of the social, environmental and economic benefits of heritage assets. (Heritage assets can be people's	Both of these points have been added to Table B1.

Consultee	Date	Comment	How this has been addressed.
		homes, places of work, leisure, tourism, recreation, nature conservation, and religious/spiritual activity. Damage or lack of access as a result of flooding will negatively affect society, the environment and economy). ■ Harm to/loss of sense of place and local distinctiveness.	
Historic England	27th September 2024	We would suggest amending the historic environment objective to better align with the NPPF. For example, 'Conserve or enhance the significance, including any contribution made by setting, of the historic environment and its component heritage assets.' It could even be expanded to include promoting the wider public benefits of conserving and enhancing the historic environment. The first bullet under the 'Supporting Appraisal Questions' should be amended to align with the amended objective.	The SEA objective has been updated to the following – *'To protect and enhance the historic environment, including heritage assets (designated and non-designated) and their contribution made by setting, of the historic environment and its component heritage assets'.* See Table 4-3 for more details.
Historic England	27th September 2024	We are content with the Historic Environment being scoped in.	Noted – no action required.
Historic England	27th September 2024	Further information on SEA and issues relating to the historic environment is available in Historic England's Sustainability Appraisal and Strategic Environmental Assessment: Historic England Advice Note 8. We also advise consulting with the Westminster City Council conservation team and the Greater London Archaeological Advisory Service	Noted – The Historic England Advice Note 8 has been used to help guide the assessment of the historic environment within this Environmental Report.

Appendix B

Baseline, Review of Plans, Policies and Programmes

Public

Table B-1 - Baseline, Issues and Opportunities

Topic	Baseline Characteristics	Likely Evolution of the Baseline without the LFRMS	Issues, Opportunities and Implications for the LFRMS
Population and Equalities	WCC has a total population of 205,800 people[14], which comprises 2.3% of the total population of London and 0.3% of the total population of England. The population density is 9,514 residents per km^2, which is higher than the national figure of 434 residents per km^2. This is the fourth least populated borough in London. According to the 2021 Census[15], 55.1% of the population in Westminster are White, followed by 16.7% who are Asian, Asian British or Asian Welsh, 13.5% who are 'Other', 8% are Black, Black British, Black Welsh, Caribbean or African, and 6.5% who are Mixed or Multiple Ethnic groups. The majority of residents in Westminster identify as Christian (37.3%), followed by No Religion (25.9%), Muslim (20%), Jewish (2.8%), Hindu (2.2%), Buddhist (1.3%), Any Other Religion (0.9%), Sikh (0.3%), and 9.4% chose not to answer[16]. Looking at the Indices of Multiple Deprivation (IMD) in 2019[17], WCC was ranked 87th out of 151 upper tier authorities in 2019 (1 being the most deprived and 151 the least deprived), which puts the borough in the 50% least deprived nationally. Additionally, four of the Lower Super Output Areas (LSOAs) within Westminster are amongst the 10% least deprived nationally, with an additional 11 LSOAs within the 20% least deprived. However, Westminster has three LSOAs within the 10% most deprived neighbourhoods nationally. In Westminster, an estimated 10,700 people aged 65 years and over currently live alone[18]. According to Age UK, the risk of loneliness in people aged 65+ in Westminster is generally high or very high[19].	By 2035, it is predicted that the population of Westminster will grow by approximately 36%[20], with an increasing ageing population. By 2032, it is anticipated that more people will be living on their own, making up 35% of all households nationally. In 2016, 14% of the working age population in the UK were from an ethnic minority background[21]. This is increasing, with the proportion expected to rise to 21% by 2051. The working population within Westminster is likely to become increasingly diverse, as indicated by the national trend. In the absence of an appropriate LFRMS it is considered likely that a greater number of people would be considered to be at risk of flooding. The LFRMS should ensure adequate protection and infrastructure is in place to protect both the population now and in the future, as well as take into account demographic changes, in particular an ageing population.	▪ There is anticipated to be a population growth by 2030. ▪ With an increasing ageing population in WCC, there is likely to be an increase in vulnerable members of the population who may be less able to adapt to a flood event. ▪ There are opportunities to reduce and manage flood risk for the elderly and rural communities. ▪ There is often an inequality in terms of social deprivation and flood risk exposure from all sources of flooding. ▪ The Local Strategy should aim to reduce and manage flood risk. ▪ Development will need to support future demographic changes.
Human Health	The average life expectancy at birth in Westminster is 81.4 years for males and 86.4 years for females. This is higher than both the London (80.3 years for males and 84.4 years for females) and national (79.3 years for males and 83.2 years for females)[22]. Life expectancy is 18.0 years lower for men and 9.0 years lower for women in the most deprived areas of Westminster than in the least deprived areas[18]. The difference in life	Overall, the health of individuals in Westminster surpasses the national average for England. The general trend over previous years shows that the proportion of those with poor health is decreasing, suggesting that overall health	▪ The population of WCC is expected to continue to increase which may place additional strain on services and infrastructure. ▪ The main immediate health risks of flooding include physical injury, or an

[14] NOMIS (2024) Labour Market Profile – Westminster. Available at: https://www.nomisweb.co.uk/reports/lmp/la/1946157259/report.aspx?town=westminster
[15] Office for National Statistics (2022) Ethnic group, England and Wales: Census 2021. Available at: https://www.ons.gov.uk/peoplepopulationandcommunity/culturalidentity/ethnicity/bulletins/ethnicgroupenglandandwales/census2021
[16] Office for National Statistics (2022) Religion, England and Wales: Census 2021. Available at: https://www.ons.gov.uk/peoplepopulationandcommunity/culturalidentity/religion/bulletins/religionenglandandwales/census2021
[17] Ministry of Housing, Communities and Local Government, Indices of Multiple Deprivation 2019. Available online at: English indices of deprivation 2019 - GOV.UK (www.gov.uk)
[18] Westminster City Council (2023) Joint Strategic Needs Assessment. Available at: https://www.onewestminster.org.uk/resources/reports-and-statistics
[19] Age UK, Loneliness Maps. Available at: https://www.ageuk.org.uk/our-impact/policy-research/loneliness-research-and-resources/loneliness-maps/
[20] GLA (2024) London Population Projections Explorer. Available at: https://apps.london.gov.uk/population-projections/
[21] The Kings Fund (2012) Demography: Future Trends. Available online at: https://www.kingsfund.org.uk/insight-and-analysis/reports/future-trends-overview
[22] Office for Health Improvement & Disparities (2024) Fingertips Public Health Data, Local Authority Health Profiles. Available at: https://fingertips.phe.org.uk/profile/health-profiles/data#page/1/gid/1938132701/pat/6/ati/501/are/E09000033/iid/90366/age/1/sex/1/cat/-1/ctp/-1/yrr/3/cid/4/tbm/1

Topic	Baseline Characteristics	Likely Evolution of the Baseline without the LFRMS	Issues, Opportunities and Implications for the LFRMS
	expectancy for females is in line with the national average but the third highest in London. However, the life expectancy gap for males is the highest in the country. The percentage of physically active adults in Westminster is 67.9%, which is slightly higher than the London and England figures of 66.3% and 67.1% respectively[22]. In Westminster, 47.9% of adults (aged 18+) are classified as overweight or obese, which is lower than both the London (57.2%) and national (64.0%) figures. However, in Year 6 children (10-11 years), 28.6% are classified as obese, which is higher than the London and national figures of 24.8% and 22.7% respectively[22]. According to IMD 2019[17], WCC is ranked 130 out of 151 upper-tier local authorities (where a rank of 1 is the most deprived and 151 is the least deprived) for health deprivation. This domain measures the risk of premature death and the impairment of quality of life through poor physical or mental health. The proportion of people within the borough who are disabled under the equality act is 15.8%[23]. This is lower than the national proportion of 17.7% but is higher than the London proportion of 11.8%. Additionally, 10% of Westminster's residents are living in overcrowded households, which is higher than the national average of 4.4%[24]. Poor housing conditions, including overcrowding contribute to poor mental and physical health. Poor-quality housing conditions (including damp, cold, mould, noise and overcrowding) is strongly associated with poor physical and mental health[25]. Flooding can cause a range of health problems. There may be direct effects such as physical injury, or an increased risk of developing skin or gut infections through contact with contaminated food water. Longer-term effects can include mental health problems and chest problems due to exposure to mould and damp. In England, most of the health burden linked to flooding comes from effects on people's mental health and wellbeing. In 2017, percentage of adults in Westminster who reported having mental disorders was 18.7%, higher than the national average of 16.9%[26]. The UK Public Health Register acknowledges the impact flood events can have on mental health, noting that impacts are not always immediately obvious, and that stress can continue long after water levels have receded[27]. There are a variety of secondary stressors that flooding can introduce on individuals. These include lack of access to healthcare, new or continuing health related stressors or	is improving and could continue to improve in the future. Climate change will have an impact on population and have implications for the management of flooding in Westminster particularly for balancing the costs and benefits of flood defence. In the absence of an appropriate LFRMS it is considered likely that a greater number of people would be considered to be potentially at risk from flooding. This could put additional strain on the mental health of some residents who live within areas prone to flooding, from the flood itself, the aftermath and fear of flooding.	increased risk of developing skin or gut infections through contact with contaminated food water. Longer-term effects can include mental health problems and chest problems due to exposure to mould and damp ■ There are a variety of secondary stressors that flooding can introduce on individuals. ■ There are large disparities for life expectancy between the most and least deprived areas. ■ The LFRMS should ensure that the flood prevention measures meet the demands and needs of the future population. ■ The LFRMS needs to balance the costs and benefits of flood defences.

[23] Office for National Statistics (2023) Disability, England and Wales: Census 2021. Available at: https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandwellbeing/bulletins/disabilityenglandandwales/census2021
[24] Office for National Statistics (2023) Overcrowding and under-occupancy by household characteristics, England and Wales: Census 2021. Available at: https://www.ons.gov.uk/peoplepopulationandcommunity/housing/articles/overcrowdingandunderoccupancybyhouseholdcharacteristicsenglandandwales/census2021
[25] UK Parliament (2022) Housing and health: a reading list. Available at: https://commonslibrary.parliament.uk/research-briefings/cbp-9414/
[26] Office for Health Improvements and Disparities (OHID) Mental Health and Wellbeing – Westminster. Available at: https://fingertips.phe.org.uk/profile-group/mental-health/profile/mh-jsna/data#page/1/gid/1938132922/pat/6/ati/502/are/E09000033/iid/93495/age/164/sex/4/cat/-1/ctp/-1/yrr/1/cid/4/tbm/1
[27] UK Public Health Register, Health impacts on flooding. Available at: https://ukphr.org/health-impacts-on-flooding/ (Accessed 01/11/2023)

Topic	Baseline Characteristics	Likely Evolution of the Baseline without the LFRMS	Issues, Opportunities and Implications for the LFRMS
	conditions, and lack of access to prescription medications. Secondary economic stressors such as problems with compensation, rebuilding of homes, loss of employment and/or income and loss of physical possessions can also impact mental wellbeing after a flood event.		
Economy	In the 2023-2024 period, 76.9% of working aged people (aged 16-64) in Westminster were economically active[28], slightly lower than both the London and national figures of 78.6% and 78.8% respectively. Additionally, 5.7% of those aged 16-64 in Westminster were unemployed, similar to the London figure of 5.1%, but significantly higher than the England figure of 3.9%. The economic inactivity rate is the percentage of the population not working and not seeking nor available to work. In 2023-2024, the economic inactivity rate in Westminster was reported to be 23.1% which is slightly higher than both London (21.4% and England 21.2%)[28]. The leading cause of economic inactivity in Westminster in this period was being a student. For households in Westminster that have at least one person aged between 16 and 64 years, 14.9% of households were reported to be workless in 2022, which was higher than the London average of 11.9%, and the England average of 13.4%. As of 2022, there are 52,000 businesses in Westminster, providing 767,000 jobs[29]. The top industries within Westminster are: professional, scientific and technical, accommodation and food services, public administration and defence, information and communication, and financial and insurance. Westminster is home to a number of London's popular tourist sites, including but not limited to: Buckingham Palace, Kensington Park (Kensington Palace is located in the neighbouring Royal Borough of Kensington and Chelsea), Big Ben, Westminster Abbey, Royal Albert Hall, Tate Modern, Hyde Park, and the National Gallery. More than 25 million tourists visit Westminster each year[30]. In London as a whole, tourism contributed £10.9 billion to the economy in 2022[31]. Westminster is ranked 85 out of 151 upper-tier local authorities (where a rank of 1 is the most deprived and 151 is the least deprived) for income deprivation. Nearly two million properties in floodplains along rivers, estuaries and coasts in the UK are potentially at risk of river or coastal flooding. In England and Wales alone, over 4 million people and properties valued at over £200 billion are at risk[32]. The total economic damages for England from the winter 2015 to 2016 floods were estimated to be between £1.3 billion and £1.9 billion, with a best estimate of £1.6 billion.	Over recent years, the employment rate has increased, and the economic inactivity rate has decreased in Westminster. This is a good indication that the economy is growing and will continue to grow in the future. The changing age structure in Westminster is projected to alter the dependency ratio. The number of non-working age people (children and individuals of pension age 65+) is expected to increase which will increase the burden on the number of working age people (those who are 16 to 64 years old). WCC's 2023-2026 economic objectives to create: resilient business and high streets, vibrant West End, and employment opportunities for all[36]. WCC aim to achieve this by supporting small businesses, providing high quality experiences to visitors, and improving the skills of residents to allow them to take advantage of Westminster's jobs. The annual economic damages from flooding in UK is predicted to increase by 3 - 9 times by the 2080s, due to more frequent and severe storms which will result from climate change. Without the LFRMS there is potential that more businesses and tourist attractions	▪ The employment rate has increased, and the economic activity rate has decreased, indicating economic growth. ▪ There is the potential for increased strain to support non-working age people as the population of those aged 65 and over increases. ▪ There is opportunity to support the growing economy and achieve WBC's economic objectives 2023-2026, particularly in the aftermath of the pandemic, by protecting local businesses from flooding. ▪ The LFRMS should reduce and manage flood risk on local businesses.

[28] NOMIS (2024) Labour Market Profile – Westminster. Available at: https://www.nomisweb.co.uk/reports/lmp/la/1946157259/report.aspx?c1=2013265927&c2=2092957699
[29] Westminster City Council (2022) Facts and Figures about Westminster. Available at: https://www.westminster.gov.uk/about-council/data/facts-and-figures-about-westminster
[30] City of Westminster (2019) City Plan 2019-2040. Available at: https://www.westminster.gov.uk/sites/default/files/city_plan_our_approach.pdf
[31] Statista (2022) Direct contribution of travel and tourism to GDP in London, United Kingdom from 2019 to 2021, with a forecast to 2022. Available at: https://www.statista.com/statistics/1403180/travel-tourism-direct-contribution-gdp-london-uk/
[32] Future Flooding Executive Summary. Available online at: 7496 Exec Summary Cover 1st (publishing.service.gov.uk)
[36] City of Westminster (2023) Our Plan for a Fairer Economy. Available at: https://www.westminster.gov.uk/fairer-economy#:~:text=Our%20ambition%20is%20a%20strong,green%20economy%20at%20its%20core.

Topic	Baseline Characteristics	Likely Evolution of the Baseline without the LFRMS	Issues, Opportunities and Implications for the LFRMS
	Business (non-residential) properties suffered the greatest proportion of flood damages, with 32% of total damages occurring to this sector (best estimate of £513 million incurred by 4,944 properties)[33]. Two major flood events impacted Westminster in July 2021, collectively affecting 270 properties – predominantly around Maida Vale, Harrow Road, Westbourne and Little Venice[34], with similar widespread flooding events also occurring in Pimlico in June 2016[35].	may be at risk of flooding and overall economic damages and the impact on the local and regional economy may be higher without the implementation of new measures and interventions.	
Biodiversity	There are no international or nationally designated ecological sites within Westminster, nor are there any Sites of Special Scientific Interest (SSSIs). There are 39 sites of importance for nature conservation (SINCs) located within Westminster. There are 56 habitats recognised as being of 'principal importance' for the conservation of biological diversity in England under section 41 of the Natural Environment and Rural Community (NERC) Act 2006[37]. Priority habitats are a focus for conservation action in England. There are numerous areas of priority habitat within Westminster. This includes deciduous woodland, which is largely located in the green spaces within the borough around Hyde Park, Kensington gardens, St James's Park, The Green Park, and Regent's Park. Mudflats are also located along the southern boundary of Westminster with the River Thames, and there are also a number of areas of priority habitat 'no main habitat but additional habitats present' also located in the borough's green spaces. Invasive Non-native Species (INNS), pests and pathogens have the ability to spread, causing damage to the environment, the economy, human health. The Wildlife and Countryside Act 1981[38] makes it an offence to release or allow to escape into the wild any animal, plant or micro-organism not ordinarily resident in the UK (as listed in Schedule 9 of the Act). There are a number of INNS located in London, as listed in the London Invasive Species Initiative[39]. Those identified in WCC include Japanese Knotweed, Australian swamp-stonecrop, Giant Hogweed (present in locations across WCC) Red-eared Terrapin and Pond Slider Terrapin (present in Regent's Park Boating Lake)[40].	The 2023 State of Nature Report[44] highlights the general decrease in biodiversity in the UK. Since 1970, species abundance has decreased by 193% and species distribution has decreased by 135%. Of the 8,431 species that have been assessed using the International Union for Conservation of Nature (IUCN) Regional Red List criteria, 16.15% are currently threatened with extinction from Great Britain and 2% are already extinct. A rising population and associated need for development may cause further loss, fragmentation and degradation of habitats, causing a further decline in biodiversity. Climate change presents another threat to ecosystem services and biodiversity through increased temperatures and flood events and. northward colonisation of species in the UK. In order to preserve biodiversity and natural habitats, soft engineering and nature-based solutions will need to be used over traditional hard engineering. WCC's ecological emergency declaration also detail's the Council's commitments to improve biodiversity net gain for	■ Climate change and reduced water quality will put strains on terrestrial and aquatic ecosystems. ■ Given that ecosystem services are the benefits that nature provides to people, areas of high (potential) provision are often the green and blue spaces close to centres of population, as well as connecting habitats that link these with more remote designated habitats and landscapes. ■ There is a need to working towards halting the decline in species abundance by 2030, and then increase abundance by at least 10% to exceed 2022 levels by 2042. ■ The LFRMS should consider the severity of the current environment and biodiversity baseline of all parts of society and place emphasis on improving current water quality and future biodiversity in WCC. ■ The LFRMS will need to adhere to WCC's future biodiversity goals and mitigate any potential impacts on habitats leading to biodiversity loss.

[33] Flood risk and the UK. Available online at: Energy & Climate Intelligence Unit | Flood risk and the UK (eciu.net)
[34] Westminster City Council, Westminster Local Flood Risk Management Strategy
[35] City of Westminster, Preparing for Floods. Available at: https://www.westminster.gov.uk/residents/floods/preparing-floods
[37] Natural Environment and Rural Community 2006. Available online at: https://www.legislation.gov.uk/ukpga/2006/16/contents
[38] Wildlife and Countryside Act 1981. Available at: https://www.legislation.gov.uk/ukpga/1981/69/contents (Accessed 01/11/2023)
[39] Greenspace Information for Greater London CIC, London Invasive Species Initiative. Available at: https://www.gigl.org.uk/our-data-holdings/species-data/london-invasive-species/
[40] INNS Mapper, [online] available at: https://innsmapper.org/home
[44] NBN (2023) State of Nature Report. Available online at: stateofnature.org.uk/wp-content/uploads/2023/09/TP25999-State-of-Nature-main-report_2023_FULL-DOC-v12.pdf

Topic	Baseline Characteristics	Likely Evolution of the Baseline without the LFRMS	Issues, Opportunities and Implications for the LFRMS
	In 2023, WCC declared an ecological emergency[41]. This declaration acknowledges the stress that high carbon emissions have placed on global nature and ecosystems and the impact this has had on Westminster's plants and wildlife. Flooding can have adverse impacts on biodiversity including causing drowning, disease proliferation and habitat destruction[42]. Extreme flood events have been shown to negatively impact freshwater ecosystems. Floods increase surface run-off which introduces more soil, organic matter and pollutants into water courses[43]. This contamination of floodwater can impact water quality and disrupt ecosystems. Increased surface run-off also exacerbates erosion within the river channel and suspended sediment will eventually settle out which can clog riverbeds and streams, smother aquatic organisms and destroy habitats. As a result, plant biomass and the abundance of both vertebrates and invertebrates can be dramatically reduced by extreme floods. Flood events increase the chance of spreading waterborne diseases and receding floodwater can create stagnant pools of water which animals can drink from.	Westminster, building on recent achievements such as the 'Greening Westminster'[45] fund, the 'No Mow May' initiative, the ban on the use of the pesticide Glyphosate. This is in addition to the development of a Nature and Urban Ecology Strategy and undertaking a Green Infrastructure Audit to assess the current condition and quality of green spaces in Westminster, including the 33 Sites of Importance for Nature Conservation SINC locations in the City. The Environment Act[46] 2021 specifies a mandatory 10% increase in Biodiversity Net Gain (BNG) for new developments. Biodiversity on development sites will need to be preserved, with additional mitigation put in to increase biodiversity. This increase in biodiversity may be provided on site enhancement, or through off-site compensation. Without the LFRMS, the current negative effects on biodiversity are likely to continue with flooding events expected to increase, resulting in some of the region's most important biodiversity and ecosystem services being lost.	
Landscape and Townscape	Westminster is located across one Landscape National Character Areas (NCA)[47]. The purpose of these NCAs is to help distinguish different regions of landscape identity and character in UK. Westminster is located in NCA 112: Inner London. This NCA is described as: predominantly urban, the Inner London NCA lies at the centre of the Thames Basin on a broad flood plain which rises in gentle terraces, providing panoramic views of London's skyline from the clay plateaux and ridges in the north at the border with the Northern Thames Basin. The NCA is steeped in both historical and contemporary culture; it is the	As the population of Westminster continues to grow, the demand for housing will grow. To cater for the growing population, it is likely that significant development will take place to provide not only homes, but associated services required such as healthcare and education	▪ Climate change may have an impact on landscape features such as drying out reservoirs, reducing the volume of water in rivers and increasing the frequency and intensity of flood events.

[41] City of Westminster (2023) Actinon nature, ecology and biodiversity. Available at: https://www.westminster.gov.uk/fairer-environment-hub/take-environmental-action-resident/fairer-environment-hub/take-environmental-action-resident/action-nature-ecology-and-biodiversity
[42] National Geographic, The Many Effects of Flooding. Available at: https://education.nationalgeographic.org/resource/many-effects-flooding/ (Accessed 07/11/2023)
[43] British Ecological Society, Flooding in the UK: ecological impacts and an ecosystem approach. Available at: https://www.britishecologicalsociety.org/flooding-in-the-uk-ecological-impacts-and-an-ecosystem-approach/ (Accessed 07/11/2023)
[45] City of Westminster, Greening Westminster. Available at: https://www.westminster.gov.uk/place-shaping/greening-westminster
[46] Environment Act (2021). Available at: Environment Act 2021 (legislation.gov.uk)
[47] Natural England, National Character Area Profiles. Available at: https://nationalcharacterareas.co.uk/

Topic	Baseline Characteristics	Likely Evolution of the Baseline without the LFRMS	Issues, Opportunities and Implications for the LFRMS
	centre of UK Government and a major international hub for finance, business, tourism, transport and recreation. Owing to its urban nature, Inner London relies heavily on ecosystem services provided by the surrounding NCAs, such as flood alleviation, air temperature regulation and recreational services. For example, the Thames Barrier in the Greater Thames Estuary is a major tidal flood defence for London. Westminster has a number of main settlement areas, including: Soho, St James, Mayfair, Covent Garden, Pimlico, Victoria, Belgravia and Knightsbridge (shared with neighbouring Kensington), Paddington and Marylebone. The key roads within Westminster include the A501, which provides access from the west and east, A5, and A4202 which provides access from the north to south. Further transport links are outlined in Material Assets. The Thames Path National Trail is a 298km walking trail from the source of the River Thames in the Cotswolds, through villages and cities to the Thames Barrier and on to Woolwich. The Thames Path now continues along the England Coast Path National Trail to Grain in north Kent (374 km)[48]. The section of the Thames Path that passes through Westminster is approximately 4.9km long and follows the southern boundary of the borough with the River Thames. National Cycle Network (NCN) is a UK-wide network of signed paths and routes for walking, wheeling, cycling and exploring outdoors[49].There is one NCN route within Westminster - NCN Route 4. There are 18 parks and open spaces within the borough, an additional 23 historic green spaces, 18 square gardens, and 10 pocket parks[50]. Additionally, five of London's Royal Parks are also located within Westminster: Hyde Park, Kensington Gardens, The Green Park, St James's Park, and The Regent's Park[51]. Westminster's unique townscape gives rise to some of the most familiar and cherished views of London. These include views towards and from the River Thames and its frontages, views from the Royal Parks, as well as many other views of famous historic London landmarks[52]. Due to this WCC has a number of protected views of a strategic nature (as outlined in the London Plan) as well as local views, which are valued by local communities. In total there are 18 Strategic Protected Views and 45 Locally protected views.	facilities as well as shops and business expansion to provide jobs. Climate change has the potential to have an impact on landscape features such as drying out ponds and lakes, reducing the volume of water in rivers, and increasing the frequency and intensity of flood events. Without the LFRMS, the impacts of flooding may not be as well managed across Westminster, placing the landscape at greater risk from flooding and erosion. This could lead to the degradation of WCC's landscape and townscape character and loss of valuable green infrastructure.	▪ The expected population growth will be driving the need for additional homes and facilities. ▪ The LFRMS will need to ensure that it protects WCC's unique landscape and townscape.
Historic Environment	Heritage assets range from sites and buildings of local historic value to those of the highest significance, such as World Heritage Sites which are internationally recognised to be of Outstanding Universal Value. These assets are an irreplaceable resource and should be	Climate change poses a significant threat to the historic environment, including undiscovered and undesignated heritage	▪ Future growth and development have the potential to affect the survival, fabric, condition and setting of cultural

[48] National Trails, Thames Path. Available at: https://www.nationaltrail.co.uk/en_GB/trails/thames-path/
[49] Sustrans UK – National Cycle network. Available online at: https://www.sustrans.org.uk/national-cycle-network
[50] City of Westminster, Parks and Open Spaces. Available at: https://www.westminster.gov.uk/leisure-libraries-and-community/parks-and-open-spaces
[51] The Royal Parks, London's Royal Parks. Available at: https://www.royalparks.org.uk/visit/parks
[52] WCC, City Plan, 2019 – 2040, Views Background Paper, 2019 [online] available at: https://www.westminster.gov.uk/planning-building-control-and-environmental-regulations/planning-policy/planning-building-control-and-environmental-regulations/planning-policy/city-plan-2019-2040-previous-stages

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	conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of existing and future generations[53]. The historic environment is recognised as an irreplaceable and valued resource which contributes to the local character and distinctiveness of Westminster. Heritage assets such as historic parks and gardens, listed buildings, conservation areas and scheduled monuments can foster healthy lifestyles, community cohesion, provide a 'sense of place' and drive economic vitality. WCC has a very unique architectural heritage. 'The steady and successive development of the area since the sixteenth century has created a complex townscape, which includes many of London's most famous and best-loved buildings and landmarks; these enhanced by the open spaces of the Royal Parks, London Squares and the River Thames'[54]. There are a number of designated assets throughout Westminster including: one World Heritage Site (Palace of Westminster) and three Scheduled monuments. Scheduled Monuments under the Ancient Monuments and Archaeological Areas Act 1979[55] are protected by law. There are also 3,970 listed buildings, and 28 Registered Parks and Gardens. Amongst the listed buildings in Westminster, some of the most prominent of which are Buckingham Palace , Horse Guards, Royal Opera House, Downing Street and Royal Albert Hall. There are currently 56 conservation areas within Westminster[56]. A conservation area is an area of special architectural or historic interest, which WCC has identified worth protecting. Section 69 of the Planning (Listed Buildings and Conservation Areas) Act 1990[57] gives the WCC the authority to designate such areas, in order to preserve, and enhance the special character of these areas. Conservation Area Appraisals and Management plans (CAAMPs) provide detailed information on the special character of conservation areas and provide guidance for development and maintenance of properties. Historic England's Heritage at Risk (HAR)[58] programme helps to understand the overall state of England's heritage sites. It identifies those sites that are most at risk of being lost as a result of neglect, decay or inappropriate development. In Westminster there are 19 heritage assets on the HAR register, all of which are listed buildings. Climate change poses both a direct and indirect risk to heritage assets and their settings. Climate change effects on the historic environment include but are not limited to: damage or loss of heritage assets, harm to or loss of plants within historic landscapes, damage to buildings from rainwater, and damage to or loss of historic and archaeological collections	assets. Increased warmth may encourage a rise in the number of invasive plant and animal species, which could change the character of historic and designed landscapes by reducing numbers of or killing off native flora and fauna. Hotter, drier conditions may also increase the risk of fire as well as soil shrinkage, which can lead to building subsidence, structural deformation and building collapse. More extreme rainfall events and increase levels of flooding have potential to increase the of flood risk to historic buildings. Water saturation can damage historic buildings designed landscapes, non-designated assets and archaeological remains, particularly if standing water conditions persist. Guidance on Flooding and Historic Buildings[61] by Historic England provides guidance on how to prepare for flooding and recommends actions to be taken during and after a flood to minimise damage to historic buildings. In the absence of the LFRMS, it is likely that the damage risk from increased flooding events will results in the loss and degradation of heritage assets.	heritage assets (both above and below ground). ■ An increase in rainfall, extreme weather events and flooding may result in irreplaceable damage, degradation and/or erosion of heritage and archaeological sites. ■ The LFRMS should promote the management and maintenance of historic and cultural assets and improve the climate resilience of cultural sites, ensuring the maintenance of distinctive characteristics. ■ Flooding can cause harm to or loss of the social, environmental and economic benefits of heritage assets. (Heritage assets can be people's homes, places of work, leisure, tourism, recreation, nature conservation, and religious/spiritual activity. ■ Flooding can cause harm to or loss of of sense of place and local distinctiveness.

[53] NPPF, Chapter 16, Conserving and enhancing the historic environment (paragraph 195) [online] available at: https://www.gov.uk/guidance/national-planning-policy-framework/16-conserving-and-enhancing-the-historic-environment#footnote71
[54] City of Westminster, Metropolitan Views (Draft) SPD, 2007 [online] available at: https://www.westminster.gov.uk/planning-building-control-and-environmental-regulations/design-and-heritage/westminsters-heritage-assets
[55] Ancient Monuments and Archaeological Areas Act 1979. Available at: https://www.legislation.gov.uk/ukpga/1979/46/contents (Accessed 01/11/2023)
[56] City of Westminster, Conservation Areas. Available at: https://www.westminster.gov.uk/planning-building-control-and-environmental-regulations/design-and-heritage/conservation-areas
[57] Planning (Listed Buildings and Conservation Act) 1990. Available at: https://www.legislation.gov.uk/ukpga/1990/9/contents (Accessed 01/11/2023)
[58] Historic England (2022) Heritage at Risk, London and Southeast Register. Available online at: https://historicengland.org.uk/images-books/publications/har-2022-registers/lon-se-har-register2022/
[61] Guidance of Flooding and Historic buildings (2015). Available online at: https://historicengland.org.uk/advice/technical-advice/flooding-and-historic-buildings/

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	and archives[59]. Flood water inundation and saturation can also damage historic buildings and designed landscapes, particularly if standing water conditions persist, as well as damaging buried archaeological assets. Local heritage plays an essential role in building and reinforcing a sense of local character and distinctiveness in the historic environment. In addition to the designated assets, the region has a number of non-designated assets that make important contributions to the local historic character. According to Historic England, 'non-designated heritage assets are locally-identified 'buildings, monuments, sites, places, areas or landscapes identified by plan making bodies as having a degree of heritage significance meriting consideration in planning decisions but which do not meet the criteria for designated heritage assets'[60]. In some places non-designated heritage assets are equivalent to designated heritage assets in terms of significance.		
Water Environment	The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017[62] (hereafter referred to as the 'WFD Regulations') are the primary mechanism for assessing and managing the water environment in England, which includes all surface freshwater bodies (lakes, streams, rivers), groundwaters, associated ecosystems, estuaries and coastal waters out to one mile from low water. They transpose and implement water quality standards from the EU's 2000 Water Framework Directive and place a statutory duty on the English Ministers to prevent deterioration and improve all water bodies to 'good status' by 2027[63]. Westminster falls within the Thames River Basin District (RBD). The Thames is the only river in Westminster, as other watercourses have been subsumed into the sewerage network. Westminster also falls within the London Middle Management Catchment of the Thames RBD. The Water Framework Directive (WFD)[64] sets an objective of aiming to achieve at least 'good' status for all waterbodies by a set deadline specific for each waterbody. Most of the monitored waterbodies are 'main rivers' that are under the jurisdiction of the Environment Agency. In 2022, the London Middle Management Catchment achieved 'moderate' Ecological Status, however, it 'failed' for Chemical Status. The reasons for this failure is predominantly due to	In terms of water quality, the requirements of the WFD should lead to continued improvements to water quality in watercourses. However, water quality is also likely to continue to be affected by pollution incidents in the area; runoff from urban areas; the presence of non-native species; and physical modifications to water bodies. Meeting water supply demand over the next 25 years will be challenging in the London. Deficits may develop across England by the 2050s due to climate change alone; these would be exacerbated by population growth. If no action is taken between 2025 and 2050, around 3,435 million extra litres of water per day will be needed to address future pressures[65].	■ The effects from climate change on increased flooding and drought on WCC's water sources. ■ Potential for the use of groundwater sources, which could affect nearby receptors that are dependent upon groundwater, including groundwater dependent terrestrial ecosystems, watercourses, and existing groundwater abstractions. ■ Reduced water quality could have significant adverse effects on dependant ecosystems. ■ The physical and chemical quality of water resources is an important aspect of the natural environment and can be adversely affected by pollution associated with surface water runoff from new or existing transport infrastructure, as well as by changes to

[59] Historic England, Researching Heritage, Climate Change and Environment. Available at: https://historicengland.org.uk/research/current/threats/heritage-climate-change-environment/
[60] Historic England, Local Heritage Listing: Identifying and Conserving Local Heritage. Historic England Advice Note 7 (Second Edition) [online] available at: https://historicengland.org.uk/images-books/publications/local-heritage-listing-advice-note-7/heag301-local-heritage-listing/
[62] The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017. Available at: https://www.legislation.gov.uk/uksi/2017/407/contents/made (Accessed 01/11/2023)
[63] Welsh Parliament, Water Quality in Wales, Research Briefing. Available at: https://research.senedd.wales/media/v3fl5zes/23-12-water-quality-in-wales.pdf (Accessed 01/11/2023)
[64] Department for Environment, Food & Rural Affairs (2014) Water Framework Directive implementation in England and Wales: new and updated standards to protect the water environment. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/307788/river-basin-planning-standards.pdf
[65] Environment Agency (2020) Meeting our future water needs: a national framework for water resources – summary. Available online at: Meeting our future water needs: a national framework for water resources - GOV.UK (www.gov.uk)

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	physical modifications, pollution from towns, cities and transport, and pollution from waste water. National flood zone data correlates with the location of main rivers and ordinary watercourses as areas with the greatest risk of flooding. Westminster, like many historic urban centres, no longer has a functional floodplain. Flood Zone 3b has been developed over the centuries and Flood Zones 3a and b are therefore referred to as Flood Zone 3. Flood Zone 2 consists of a small number of individual areas within Westminster. The government's flood map for planning shows that portions of Westminster lie within flood risk zone 3, specifically along the River Thames main rivers. In Westminster, considerable sections of Pimlico, St James, and Victoria are within flood risk zone 3, meaning they have a high probability of flooding. Areas within flood risk zones 2 and 3 also correlate to areas that have been identified as Flood Alert areas by the Environment Agency of where low-lying land and roads are at risk of flooding from rivers, seas and groundwater. Westminster has a history surface water flooding and is susceptible to fluvial, tidal, surface water, and sewer sources. The flood risk from groundwater is very low in Westminster. Westminster sits on the north bank of the Tidal River Thames and is susceptible to both tidal and fluvial flooding. The River Thames Tidal Flood Defences within Westminster are sea defences and have a tidal designation in terms of the NPPF[2]. The river Thames floodplain is defended by over 330 km of flood walls, embankments, and nine tidal barriers. There are over 400 other structures including flood gates, outfalls, and pumps which offer protection against a tidal flood event that has a 0.1% Annual Exceedance Probability (AEP) of occurring up to the year 2030. Westminster is also defended from tidal and fluvial flooding by the Embankment flood wall[2]. Drinking Water Protected Areas (DrWPAs) and Drinking Water Safeguard Zones (DrWSZs) have been designated to protect raw waters used for public supply. There is currently one DrWSZ (Groundwater) in Westminster. The necessary protection is to achieve the aim of avoiding deterioration in the water quality in DrWPAs in order to reduce the level of purification treatment required. The River Thames at the south of WCC's boundary if a DrWPA. Similarly, the DrWSZ (Groundwater) intersects the south of the WCC area. Significant Water Management Issues are considered to be the most important issues that challenge the current and potential future uses and benefits of the water environment in each RBD. These are; ■ Physical modifications – changes made by people to rivers, lakes and estuaries, for example flood defences and weirs, and changes to the natural river channels for land drainage and navigation. These modifications alter natural flow levels, may cause excessive build-up of sediment, barriers to migration and the loss of habitats. ■ Pollution from rural areas – the effects of poor agricultural practice and rural land management on the water environment (also known as 'diffuse rural pollution'), causing sediment, nutrient and pesticide run-off. ■ Pollution from towns, cities and transport – rainwater running over hard surfaces and carrying pollutants into waters, chemicals from contaminated land, and sewage from	Climate change could potentially have a negative effect on water quality and quantity if predictions are correct; hotter drier summers may increase the prevalence of droughts and reduce the volume of water in rivers as well as base flow, making dispersion of pollution or effluent more difficult.	waterbodies which can affect their quality as a habitat. ■ The LFRMS should seek to incorporate mitigation strategies such as sustainable urban drainage systems (SUDs) and green infrastructure (GI) in order to adapt to climate change and counteract flood risk. GI can also reduce surface water runoff and have water quality co-benefits.

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	houses 'misconnected' to surface water drains rather than sewers (also known as 'diffuse urban pollution. ■ Pollution from wastewater – wastewater can contain large amounts of nutrients (such as phosphorus and nitrates), ammonia, faecal bacteria and other damaging substances. ■ Pollution from mines – contaminated water draining from mines, most of which are now abandoned, changes to the natural flow and level of water – taking too much water from rivers, canals, lakes and groundwater, means less water flowing and altering water levels can affect habitats. ■ Negative effects of non-native invasive species – the effect on the health of the natural environment of plants and animals from outside the UK introduced to UK waters.		
Air Quality and Greenhouse Gases	The main source of air pollution within Westminster is from road transport[66]. Since 1999 there has been an Air Quality Management Area (AQMA) in place for the whole of the WCC area. The AQMA was declared for Particulate Matter PM_{10} and Nitrogen dioxide NO_2. The Westminster Air Quality Action Plan[66] outlines measures to improve air quality within the AQMA of Westminster, through reducing emissions from transport, and reducing emissions from buildings and new development. However, this Action Plan is currently being updated to reflect ambitious targets. Air pollution, including sulphur, nitrogen emissions, and ground-level ozone, impairs ecosystem function and growth. Pollutants can contaminate drinking water via groundwater seepage. Air pollution also degrades water quality by harming vegetation, which filters water naturally. This affects ecosystems' ability to capture carbon, crucial for mitigating climate change impacts[67]. There is consistent evidence demonstrating clear adverse effects of exposure to air pollutants on health outcomes (morbidity and mortality) across all population groups. In 2022, the proportion of mortality attributable to particulate air pollution was 7.8% in Westminster. This is higher than the estimated proportion of 5.8% for England[68]. In 2021/22, Westminster contributed 41,413 tCO2e, a reduction when compared to the 2018/19 value of 44,619 tCO2e[69]. In 2021, Westminster was the local authority with the second highest emissions, with greenhouse gas emissions 75.9 tCO2e per km^2. Of Westminster's emissions, 37% comes from institutional buildings and facilities, 23% from industrial buildings and facilities, 15% from residential buildings, 11% from commercial buildings and facilities, 11% from road transport, and less than 2.5% from industrial processes including waste[70].	The UK Clean Air Strategy outlines plans to reduce emission of pollutants and improve air quality by the year 2030[71]. This will include reductions in public exposure to particulate matter, ammonia, nitrogen oxides, sulphur dioxide, and non-methane volatile organic compounds. However, the 29% increase in road traffic from 1990 and 2018 and 6% increase in GHG emission from 1990 to 2017. The UK wide ban on the new petrol and diesel vehicle sales by 2035 is expected to lead to a reduction in emissions from vehicles. This will improve air quality in urban areas, which will have a positive impact on health problems associated with air pollution. As the AQMA in Westminster is associated with vehicle emissions, the LFRMS is unlikely to have any implications on the future baseline of air quality and greenhouse gas emissions. Climate change is expected to cause an increase in the frequency and severity of storms and severe weather, putting MT infrastructure assets and services at an	■ The number of vehicles on the roads is likely to increase as the population rises, putting air quality at further risk of degradation. ■ The UK Government's plan to end the sale of all new conventional petrol and diesel cars and vans by 2035 and support for work and home-based electric charging facilities, will promote use of hybrid and electric vehicles, with positive effects for air quality and subsequently water quality. ■ More severe and frequent heat episodes as a result of climate change can contribute to the worsening of air quality. ■ Air quality and GHG are not considered to be significant to flood planning at the strategic level. ■ There are unlikely to be any implications to the LFRMS.

[66] City of Westminster (2019) Air Quality Action Plan 2019-2024. Available at: https://www.westminster.gov.uk/improving-air-quality
[67] Air pollution, ecosystems and biodiversity. Available online at : Air pollution, ecosystems and biodiversity | UNECE
[68] Office for Health Improvement & Disparities. Available online at: Public Health Outcomes Framework - Data - OHID (phe.org.uk)
[69] City of Westminster (2022) Annual Greenhouse Gas Emissions Reporting. Available at: file:///C:/Users/UKCET005/Downloads/Westminster%20City%20Council%20Annual%20CO2%20Summary%20Report%20-%202021-22.pdf
[70] City of Westminster, Our Climate Action Plan. Available at: https://www.westminster.gov.uk/fairer-environment-hub/understand/climate-action-plan

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	The predicted impacts of climate change and greenhouse gas emissions in Westminster could lead to more frequent and intense flooding, drought, episodes of extreme heat and stormier conditions.	increasing risk of damage from flooding. Without the LFRMA, repair and increased infrastructure to deal with flooding, may result in increased embodied carbon.	
Climatic Factors	During the most recent decade (2009-2018) the UK has been on average 0.3°C warmer than the 1981-2010 average and 0.9°C warmer than 1961-1990. All top ten warmest years have occurred since 2002. In the past few decades, there has been an increase in annual average rainfall over the UK, for which the most recent decade has been on average 5% wetter than 1961-1990 and 1% wetter than 1981-2010[72]. The changes in climate that the UK is already experiencing are projected to continue and intensify. In the second half of the century, the amount of change that occurs will depend strongly on how successful we are in reducing GHG emissions globally. By the end of the 21st century, all areas of the UK are projected to be warmer, more so in summer than in winter. Hot spells, typically defined as maximum daytime temperatures exceeding 30°C for two or more consecutive days, are largely confined to the south-east UK in the present-day. In the future (by 2070s), under a high emissions scenario, the frequency of hot spells increases. Risks associated with rising temperatures, such as more extreme heatwave events causing impacts on people's health and wellbeing, are likely to become more prevalent as a result of these projections, with their magnitude depending on the degree of change that is experienced. London, and Westminster also influenced by the Urban Heat Island (UHI) effect. The UHI results in increased heat being retained within buildings and structures in London. Overheating is a challenge all year round in London as many of London's existing homes and buildings were not built for climate change – particularly hotter, drier summers and warmer wetter winters. The result of extreme heat in summer, and the experience of occupants of existing homes and buildings that are not adapted for climate change, disproportionately impacts certain groups, especially those with pre-existing mental and physical health conditions, the very old and young, those on low incomes, outdoor workers, rough sleepers, and those with protected characteristics are at risk from and/or vulnerable to extreme heat[73].	The climate is important for water resource management because it will increase the complexity of managing water resources by affecting the amount of water available and the demand for water. Rainfall is the main source of additional water into the system, (effluent is the other major contributor and a small amount of groundwater) and temperature affects the amount of water leaving the system either directly through evaporation or indirectly through uptake from plants and animals. Lower flows and higher water temperatures can also impact on the water quality. These factors can have significant implications for water management and the LFRMS. Climate change projections indicate an increase in extreme weather events in Westminster including, heat wave, flooding, heavy snowfall, strong winds. Not only can these events affect water quality and water quantity, but they also have the potential to affect water infrastructure and Thames Water's ability to continue to provide reliable service to the population.	▪ The risk from greater flood events remains a key climate risk in Westminster with a greater risk from future predicted heavy precipitation within the winter months. ▪ The extent of future climate change will be strongly affected by the amount of greenhouse gases emitted. ▪ The risk of future flooding events will cause significant damage. ▪ Future precipitation changes will have significant impacts on human health and wellbeing and the natural capital in Westminster. ▪ The LFRMS needs to protect against current and future climatic flooding. ▪ The Strategy will need to plan for and implement/facilitate climate change adaptation, in respect of rising temperatures and extreme weather events, particularly heavy rainfall/flooding and heat to maximise resilience.

[72] Met Office, UK Climate Projections: Headline Findings, August 2022. Available at: https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/research/ukcp/ukcp18_headline_findings_v4_aug22.pdf (Accessed 01/07/2024)
[73] Mayor of London, Heat Risk. Available at: https://www.london.gov.uk/programmes-and-strategies/environment-and-climate-change/climate-change/climate-adaptation/heat

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	Increased temperatures and extreme events such as drought and wildfire pose the biggest threats while upland areas face particularly acute risks (75% of present-day upland species face a potential decline in climate suitability by 2100 under a medium level of warming)[74]. Temperature is a very important climate metric. Many other climate metric scales with temperature change, and temperature is associated with a range of potential impacts such as heat stress on humans and an increased need for cooling. Extremes of temperature can have major impacts on infrastructure, including transportation. Changes in precipitation (rainfall and snowfall) can also have many impacts including flooding and drought, which may have consequences on human health, infrastructure and the natural capital of the UK. Surface water flooding poses a significant and increasing risk, which can lead to sewer flooding and environmental pollution[75]. Westminster has a history surface water flooding and is susceptible to fluvial, tidal, surface water, and sewer sources. The flood risk from groundwater is very low in Westminster. The most recent significant floods in Westminster occurred in July 2021, with two major flood events attributed to surface water flooding. Further details on flood risk can be found in Water Environment. As identified in the existing Westminster LFRMS[2], the number of basement and ground floor residential and non-residential properties at risk of flooding in Westminster for a 1 in 30 year flood event is 4,528, for a 1 in 100 year flood event is 7,043, and for a 1 in 1000 year flood event is 14,828.		
Material Assets	***Geology and Soils*** The bedrock geology in Westminster consists of London Clay Formation (clay, silt, and sand)[76]. The superficial deposits in Westminster consists of: Alluvium, Kempton Park Gravel Member, Lynch Hill Gravel Member, and Langley Silt member[76]. There are no Geological SSSIs present within Westminster. However, there is one Site of Geological Interest (SGI), Landline Hanover Square[77]. London's parks form most of the city's land that hasn't been built on. While the Parks' landscapes have been altered over the centuries, their soils contain rich evidence of London's history. The Royal Parks charity are working to protect and improve soil quality in all their parks. Most recently, swales in Hyde Park and The Regent's Park have been installed to help manage rainfall and reduce waterlogging of the soil in downhill areas, as well as providing new wetland habitats for wildlife. In addition, fallen leaves have been left in-situ to improve the overall quality of the soils.	The 2021 Net Zero Strategy set out a series of policies and commitments designed to enable the UK to reach net zero by 2050[82]. The United Kingdom Climate Projections (UKCP18) headline findings project hotter drier summers, warmer wetter winters, increases in the frequency and intensity of extreme events, and an increase in sea level risk by the end of the 21st century across all areas of the UK. This will likely result in an increase in risk to the built environment, infrastructure assets and systems, and services in the region, which	▪ There is a need to minimise the consumption of resources, including energy and material assets. ▪ Future climate change and increases in precipitation will likely result in increased risk to the built environment, and infrastructure assets and systems. ▪ New and existing developments must understand and manage current and future climate risks and aim to embed resilience measures in future infrastructure development. ▪ There is a need to minimise the potential impact of flooding on

[74] UK Climate Change Risk Assessment 2022. Available at: https://assets.publishing.service.gov.uk/media/61e54d8f8fa8f505985ef3c7/climate-change-risk-assessment-2022.pdf (Accessed 02/07/2024)
[75] A Green Future: Our 25 Year Plan to Improve the Environment. Available at: https://assets.publishing.service.gov.uk/media/5ab3a67840f0b65bb584297e/25-year-environment-plan.pdf (Accessed 02/07/2024)
[76] British Geological Survey, BGS Geology 50K. Available at: https://www.bgs.ac.uk/datasets/bgs-geology-50k-digmapgb/ (Accessed 01/07/2024)
[77] London Geodiversity Partnership, List of London's Geological Sites. Available at: https://londongeopartnership.org.uk/londonsgeositeslist/
[82] UK's plans and progress to reach net zero by 2050. Available at: (https://assets.publishing.service.gov.uk/media/6194dfa4d3bf7f0555071b1b/net-zero-strategy-beis.pdf) Accessed (01/07/2024)

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	Energy WCC have set the target of becoming net zero by 2040. In 2022, it is estimated that households in Inner London (including Westminster) used approximately 3,045.6 kWh of electricity per year[78]. In 2018, fuel costs in London of powering and heating buildings, and running our cars and transport systems cost around £11.1 billion per year[79]. Westminster have developed a Local Area Energy Plan, to identify the most effective route to net zero carbon emissions. The plan identifies methods of achieving net zero, including within the following areas. These areas are aimed at reducing the energy cost and usage within Westminster[80]: ■ Building insulation, such as double glazing and solid wall insulation ■ Low-carbon heating and cooling systems, such as heat pumps and district heat networks ■ Renewable energy generation and flexibility, such as rooftop solar PV ■ Electric vehicle change point delivery ***Transport Infrastructure*** There are three overground train stations within Westminster: London Paddington, London Victoria and Charring Cross. Charring Cross and London Victoria both provide access to the wider area of the South East. London Paddington provides access to the West and South West of England. There are 22 tube stations located within Westminster, these are served by the Circle, Hammersmith & City, Bakerloo, Northern, District, Victoria, Piccadilly, Central, Metropolitan, and Elizabeth lines. Westminster is also served by a number of bus routes and bus stops, including Victoria Coach Station, providing access to the wider London area. ***Flood/Drainage Infrastructure*** London has a number of defences to predictable sources of flooding, such as tidal and river flooding due to the Environment Agency's flood forecasting and flood warning systems and the operation and maintenance of its flood defences. London's flood defences include: ■ The Thames Barrier ■ Approximately 400 smaller barriers and movable flood gates downstream of the Thames Barrier	could cause financial, legal and reputational impacts, amongst others. Increased levels or rainfall may also result in waterlogging, whilst extreme heat may lead to cracking and compaction which could lead to negative impacts on green spaces and soils. Increased flooding and rainfall events can also result in damage to built infrastructure, including transport networks and community facilities. Within London, 85 tube stations are at high and rising risk of flooding[83]. This risk is expected to increase with climate change. Without the updated LFRMS, suitable protection may not be provided to key assets and infrastructure.	transport and other critical infrastructure, both at present and in the future. ■ The LFRMS should aim to protect, upgrade and maintain existing flood and water management infrastructure. ■ The LFRMS should aim to increase adaptation and resilience measures (including both engineering solutions and new smarter technologies), which are likely to be needed to keep the surface transport systems and major infrastructure running efficiently.

[78] Statista (2022) Mean domestic electricity consumption per household in Great Britain in 2022, by region. Available at: https://www.statista.com/statistics/517845/average-electricity-consumption-uk/
[79] London Assembly (2022) London Annual Energy Usage. Available at: https://www.london.gov.uk/who-we-are/what-london-assembly-does/questions-mayor/find-an-answer/london-annual-energy-usage
[80] City of Westminster (2023) Local Area Energy Plan for Westminster. Available at: https://www.westminster.gov.uk/fairer-environment-hub/understand/local-area-energy-plan-westminster
[83] The Guardian (2016) 57 Tube Stations at High Risk of Flooding, says London Underground Report. Available at: https://www.theguardian.com/uk-news/2016/apr/10/57-tube-stations-high-risk-flooding-london-underground-report

Topic	Baseline Characteristics	Likely Evolution of the Baseline without the LFRMS	Issues, Opportunities and Implications for the LFRMS
	▪ over 300 km of river walls and embankments stretching into Essex and Kent. However, there are several sources of unpredictable flooding, such as heavy rainfall, overwhelmed drainage and burst water pipes, which can cause damage to homes, disrupt transport, and even affect people's safety. The climate emergency means there will be more regular and intense periods of rainfall which will increase the likelihood of flood events. London is outgrowing its drains and sewers, increasing flood risk. The London Sustainable Drainage Action Plan addresses a specific need to retrofit sustainable drainage systems across London[81]. ***Community facilities*** Westminster is also home to St Mary's Hospital, in the north of the Borough. There are also a number of private hospitals located in Westminster, largely centred around the area of Marylebone. Westminster is also home to Harley Street. This area contains a number of private Doctor and GP services. There are also three universities located in Westminster: Imperial College London, University of Westminster, and the University of London. There are a number of places of worship located in Westminster, with the most notable being Westminster Abbey and the London Central Mosque.		

[81] Mayor of London, London Sustainable Drainage Action Plan. Available at: https://www.london.gov.uk/programmes-and-strategies/environment-and-climate-change/climate-change/surface-water/london-sustainable-drainage-action-plan

Table B-2 - Relevant Plans, Policies, Strategies and Programmes – Population and Equalities

Document	Key Messages/ Issues
National	
The Equality Act, 2010	The Equality Act 2010 legally protects people from discrimination in the workplace and in wider society. It is against the law to discriminate against anyone because of: ■ Age; ■ Being or becoming a transsexual person; ■ Being married or in a civil partnership; ■ Being pregnant or having a child; ■ Disability; ■ Race including colour, nationality, ethnic or national origin; ■ Religion, belief or lack of religion/belief; ■ Sex; and ■ Sexual orientation.
National Planning Policy Framework (NPPF) (2023)	When delivering new schemes, applicants must avoid and mitigate environmental and social impacts in line with the principles set out in the NPPF and the UK Government's planning guidance. Applicants should provide evidence that they have considered reasonable opportunities to deliver environmental and social benefits as part of schemes.
Build Back Fairer: The Covid-19 Marmot Review, 2020	The Marmot Review identified that the levels of social, environmental and economic inequality in society are damaging health and well-being. This report identifies that as the UK emerges from the pandemic it would be a mistake to attempt to re-establish the status quo that existed before the pandemic. The reductions in car traffic during the pandemic resulted in cleaner air and reduction in emission of greenhouse gases. Walking and cycling as modes of transport became both necessary and desirable. As the pandemic is brought under control and public transport again becomes safe, a future for our cities

Document	Key Messages/ Issues
	based on reduction in vehicle traffic and made safe for walking and cycling in addition to public transport is a future we can both imagine and realise. Building Back Fairer requires a sizeable reduction in private car use and greater active travel and use of public transport. Efforts to support this are required urgently and would help to reduce Greenhouse Gas Emissions and lead to a more sustainable environment.
Local	
City of Westminster, City Plan 2019 – 2040	The City Plan includes 10 objectives that aim to improve the health and well-being of the city's residents and workers. The objectives also contribute to the delivery of three key themes in the council's ambition to make Westminster a City for All: homes and communities, a healthier and greener city, and opportunities for growth. The objectives of the plan are: ■ Increase the stock of high quality housing and provide variety in terms of size, type and tenure to meet need and promote mixed and inclusive communities, with a clear focus on affordability and family homes. ■ Enable job growth across a range of sectors vital to the UK economy, and ensure those from disadvantaged backgrounds benefit from the opportunities this presents. ■ Enhance the West End as London's primary retail, leisure, and visitor destination, and ensure our town centres and high streets can adapt to the challenges they face. ■ Broaden the city's cultural offer, while managing the impacts of clusters of uses, and of the evening and night time economies on existing residential communities. ■ Improve quality of life, climate resilience and tackle environmental challenges by protecting, enhancing, expanding our valuable network of parks and open spaces. ■ Enhance connections by improving options for cycling, walking, leisure, sport and play, whilst prioritising pedestrians and improving the interchange between transport modes and incorporating innovative solutions to manage the highway network. ■ Improve air quality, minimise noise and other polluting impacts, and reduce carbon and water demands by minimising detrimental impacts from development.

Document	Key Messages/ Issues
	■ Promote quality in the design of buildings and public spaces, ensuring that Westminster is attractive and welcoming. ■ Making sure our neighbourhoods continue to thrive. ■ Make the most of our unique heritage and historic environment, while encouraging innovations in building technology and improving a sense of place.
The London Plan 2021	The London Plan brings together the geographical and locational aspects of the Mayor's other strategies, to ensure consistency with those strategies, including those dealing with: transport, environment, economic development, housing, culture, health and health inequalities. The London Plan is legally part of each of London's Local Planning Authorities' Development Plan and must be taken into account when planning decisions are taken in any part of Greater London. The Plan places emphasis on reducing inequalities within communities and reducing barriers faced by social groups outlined as having protected characteristics when accessing the community facilities and culture of London.
City of Westminster, Homelessness Strategy 2019-2024	The purpose of this strategy is to set out a plan for: ■ Preventing homelessness in Westminster. ■ Securing that sufficient accommodation is and will be available for people in Westminster who are or may become homeless. ■ Securing the satisfactory provision of support for people in Westminster who are or may become homeless or who have been homeless and need support to prevent them becoming homeless again.

Table B-3 - Relevant Plans, Policies, Strategies and Programmes – Human Health

Document	Key Messages/ Issues
National	
Build Back Fairer: The Covid-19 Marmot Review, 2020	The Marmot Review identified that the levels of social, environmental and economic inequality in society are damaging health and well-being. This report identifies that as the UK emerges from the pandemic it would be a mistake to attempt to re-establish the status quo that existed before the pandemic. The reductions in car traffic during the pandemic resulted in cleaner air and reduction in emission of greenhouse gases. Walking and cycling as modes of transport became both necessary and desirable. As the pandemic is brought under control and public transport again becomes safe, a future for our cities based on reduction in vehicle traffic and made safe for walking and cycling in addition to public transport is a future we can both imagine and realise. Building Back Fairer requires a sizeable reduction in private car use and greater active travel and use of public transport. Efforts to support this are required urgently and would help to reduce Greenhouse Gas Emissions and lead to a more sustainable environment.
National Planning Policy Framework (NPPF) (2023)	Paragraph 96 of the NPPF states: *'Planning policies and decisions should aim to achieve healthy, inclusive and safe places which:* *a) promote social interaction, including opportunities for meetings between people who might not otherwise come into contact with each other – for example through mixed-use developments, strong neighbourhood centres, street layouts that allow for easy pedestrian and cycle connections within and between neighbourhoods, and active street frontages;* *b) are safe and accessible, so that crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion – for example through the use of attractive, well-designed, clear and legible pedestrian and cycle routes, and high-quality public space, which encourage the active and continual use of public areas; and*

Document	Key Messages/ Issues
	c) enable and support healthy lifestyles, especially where this would address identified local health and well-being needs – for example through the provision of safe and accessible green infrastructure, sports facilities, local shops, access to healthier food, allotments and layouts that encourage walking and cycling.'
Public Health England (2020) Health Matters, Physical Activity: Prevention and management of long-term conditions	Regular physical activity provides a range of physical and mental health and social benefits, including: ■ Reducing the risk of many long-term conditions ■ Helping manage existing conditions ■ Ensuring good musculoskeletal health ■ Developing and maintaining physical and mental function and independence ■ Supporting social inclusion ■ Helping maintain a healthy weight ■ Reducing inequalities for people with long-term conditions The CMOs' Physical Activity Guidelines state that for good physical and mental health, adults should aim to be physically active every day. Any activity is better than none, and more is better still. Regular physical activity can help to prevent and manage a range of chronic conditions and diseases, many of which are on the rise and affecting people at an earlier age.
Local	
The London Plan 2021	The London Plan builds upon the Mayor's Health Inequalities Strategy, outlining the need to improve the mental and physical health of Londoners. Policy GG3 includes measures for improving health, including: ■ ensure that the wider determinants of health are addressed in an integrated and co-ordinated way, taking a systematic approach to improving the mental and physical health of all Londoners and reducing health inequalities ■ promote more active and healthy lives for all Londoners and enable them to make healthy choices

Document	Key Messages/ Issues
	■ use the Healthy Streets Approach to prioritise health in all planning decisions ■ assess the potential impacts of development proposals and Development Plans on the mental and physical health and wellbeing of communities, in order to mitigate any potential negative impacts, maximise potential positive impacts, and help reduce health inequalities, for example through the use of Health Impact Assessments ■ plan for appropriate health and care infrastructure to address the needs of London's changing and growing population ■ seek to improve London's air quality, reduce public exposure to poor air quality and minimise inequalities in levels of exposure to air pollution ■ plan for improved access to and quality of green spaces, the provision of new green infrastructure, and spaces for play, recreation and sports ■ ensure that new buildings are well-insulated and sufficiently ventilated to avoid the health problems associated with damp, heat and cold ■ seek to create a healthy food environment, increasing the availability of healthy food and restricting unhealthy options.
City of Westminster, City Plan 2019 – 2040	The City Plan aims to develop 'A healthier and greener city', which includes: ■ maximising soft landscaping, planting more trees, being less wasteful; ■ protecting open spaces so people can enjoy healthier, more active leisure time; ■ making greener travel the best travel because it's more efficient, more pleasant and costs less; and ■ creating buildings that are more energy efficient, making them cheaper to run and more comfortable to be in.

Table B-4 - Relevant Plans, Policies, Strategies and Programmes – Economy and Employment

Document	Key Messages/ Issues
National	
Growth and Infrastructure Act (2013)	The Act allows the modification or discharge of the affordable housing elements of section 106 agreements in order to make developments more viable. Contains measures to extend permitted development rights to allow single-storey extensions of up to eight metres. Reduces the volume of extra paperwork required with a planning application; removing over-lapping development consent regimes that require multiple extra permissions from different Government agencies.
National Planning Policy Framework (2021)	To determine the minimum number of homes needed, strategic policies should be informed by a local housing need assessment. In addition to the local housing need figure, any needs that cannot be met within neighbouring areas should also be taken into account in establishing the amount of housing to be planned for. Within this context, the size, type and tenure of housing needed for different groups in the community should be assessed and reflected in planning policies, including, but not limited to: ■ Those who require affordable housing; ■ Families with children; ■ Older people; ■ Students; ■ People with disabilities; ■ Service families; ■ Travellers; ■ People who rent their homes; and ■ People wishing to commission or build their own homes.

Document	Key Messages/ Issues
National Planning Policy Framework (NPPF) (2023)	Planning policies and decisions should help create the conditions in which businesses can invest, expand and adapt. Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development. The approach taken should allow each area to build on its strengths, counter any weaknesses and address the challenges of the future.
The Enterprise Act (2016)	The Enterprise Act includes measures to: ■ Establish a Small Business Commissioner to help small firms resolve issues. ■ Extend the Primary Authority scheme to make it easier for businesses to access tailored and assured advice from local authorities, giving them greater confidence to invest and grow. ■ Protect and strengthen apprenticeships by introducing targets for apprenticeships in public sector bodies in England, and establish an Institute for Apprenticeships – an independent, employer-led body that will make sure apprenticeships meet the needs of business.
UK Industrial Growth Strategy (2017)	The Industrial Strategy sets out a long-term plan to boost the productivity and earning power of people throughout the UK. It sets out how the UK Government is working towards building a Britain fit for the future – how they will help businesses create better, higher-paying jobs in every part of the UK with investment in the skills, industries and infrastructure of the future. The strategy includes five foundations: ■ Ideas: the world's most innovative economy ■ People: good jobs and greater earning power for all ■ Infrastructure: a major upgrade to the UK's infrastructure ■ Business environment: the best place to start and grow a business ■ Places: prosperous communities across the UK

Document	Key Messages/ Issues
	The UK Government will use this strategy to work with industry, academia and civil society over the coming years to build on the UK's strengths, make more of untapped potential and create a more productive economy that works for everyone across the UK.
The Clean Growth Strategy (2017)	This Strategy sets out a comprehensive set of policies and proposals that aim to accelerate the pace of "clean growth", i.e. deliver increased economic growth and decreased emissions. The Strategy has two guiding objectives: 1. To meet our domestic commitments at the lowest possible net cost to UK taxpayers, consumers and businesses; and, 2. To maximise the social and economic benefits for the UK from this transition. In order to meet these objectives, the UK will need to nurture low carbon technologies, processes and systems that are as cheap as possible.
Local	
City of Westminster, Our Plan for a Fairer Economy 2023 – 2033	This Plan aims to make Westminster a strong and sustainable economy that delivers inclusive growth. The plan for a Fairer Economy follows the fairer Westminster strategy in putting a strong, inclusive and green economy at its core. The plan includes the following aims: ■ Resilient Businesses and High Streets – where small businesses are supported to grow and communities thrive. ■ Vibrant West End – providing a world class offer and quality experience to residents, businesses, workers and visitors. ■ Employment Opportunities for All – so that residents have the right skills to take advantage of the city's employment opportunities and can develop fulfilling careers.

Document	Key Messages/ Issues
The London Plan 2021	Chapter 6 of the London Plan outlines multiple policies that aim to build London's economy. These policies include but are not limited to, improving office spaces and affordable work spaces, improving industrial sites, visitor infrastructure, and improving skills shortages.
City of Westminster, City Plan 2019 – 2040	Section 13 of the City Plan includes policies for improving economy and employment within Westminster, supporting economic growth in town centres, visitor economy, night-time economy, infrastructure (community and digital), and improving education and skills in Westminster.

Table B-5 - Relevant Plans, Policies, Strategies and Programmes – Biodiversity and Natural Capital

Document	Key Messages/ Issues
International	
Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979)	The convention has three main aims which are stated in Article 1: ■ To conserve wild flora and fauna and their natural habitats; ■ To promote cooperation between states; and ■ To give particular attention to endangered and vulnerable species including endangered and vulnerable migratory species.
Conservation of Natural Habitats and Wild Fauna & Flora (the	The identification of a European network of Sites of Community Importance (SCIs) to be designated as Special Areas of Conservation (SACs). A SA would need to report on any potential effects on SACs and all development plans should aim to avoid adverse effects on them.

Document	Key Messages/ Issues
'Habitats Directive') (1992)	
EU (2022) 8th Environment Action Programme (EAP) to 2030	The 8th EAP guides EU environmental policy up to 2030 and sets ambitions for 2050. The Programme sets the following as a long-term priority objective: *The long-term priority objective is that, by 2050 at the latest, Europeans live well, within planetary boundaries, in a well-being economy where nothing is wasted. Growth will be regenerative, climate neutrality will be a reality, and inequalities will have been significantly reduced.* There are also six other priority objectives to 2030: ■ achieving the 2030 greenhouse gas emission reduction target and climate neutrality by 2050 ■ enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change ■ advancing towards a regenerative growth model, decoupling economic growth from resource use and environmental degradation, and accelerating the transition to a circular economy ■ pursuing a zero-pollution ambition, including for air, water and soil and protecting the health and well-being of Europeans ■ protecting, preserving and restoring biodiversity, and enhancing natural capital ■ reducing environmental and climate pressures related to production and consumption (particularly in the areas of energy, industry, buildings and infrastructure, mobility, tourism, international trade and the food system)
EU (2020) EU Biodiversity Strategy to 2030	This strategy is a comprehensive, ambitious and long-term plan to protect nature and reverse the degradation of ecosystems. The strategy aims to put Europe's biodiversity on a path to recovery by 2030 and contains specific actions and commitments. These include: ■ Establishing a larger EU-wide network of protected areas on land and at sea. ■ Launching an EU nature restoration plan. ■ Introducing measures to enable the necessary transformative change; and

Document	Key Messages/ Issues
	■ Introducing measures to tackle the global biodiversity challenge.
The Convention on Biological Diversity's (CBD's) Strategic Plan for Biodiversity 2011-2020	This plan provides an overarching framework on biodiversity, for all biodiversity-related conventions, the entire United Nations system and all other partners engaged in biodiversity management and policy development. The plan consists of five strategic goals of which 20 further Aichi goals which include: ■ Strategic Goal A: Address the underlying causes of biodiversity. ■ loss by mainstreaming biodiversity across Government and society. ■ Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use. ■ Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity. ■ Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services. ■ Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building.
Ramsar Convention on the Conservation on Wetlands of International Importance (1971)	The Ramsar Convention covers all aspects of wetland conservation. It has three main pillars of activities: ■ The designation of wetlands of international importance as Ramsar sites. ■ The promotion of the wise use of all wetlands in the territory of each country; and ■ International co-operation with other countries to further the wise use of wetlands and their resources. While the initial emphasis was on selecting sites of importance to waterbirds, now non-bird features are increasingly taken into account, both in the selection of new sites and when reviewing existing sites.

Document	Key Messages/ Issues
Kunming-Montreal Global Biodiversity Framework (GBF)	The 15th Conference of Parties to the UN Convention on Biological Diversity adopted the “Kunming-Montreal Global Biodiversity Framework” (GBF) which includes four goals and 23 targets for achievement by 2030. The implementation of the Kunming-Montreal Global Biodiversity Framework will be guided and supported through a comprehensive package of decisions also adopted at COP 15. This package includes a monitoring framework for the GBF, an enhanced mechanism for planning, monitoring, reporting and reviewing implementation, the necessary financial resources for implementation, strategic frameworks for capacity development and technical and scientific cooperation, as well as an agreement on digital sequence information on genetic resources. In adopting the Kunming-Montreal Global Biodiversity Framework, all Parties committed to setting national targets to implement it, while all other actors have been invited to develop and communicate their own commitments. At the next meeting of the Conference of the Parties in 2024 in Türkiye, the world will take stock of the targets and commitments that have been set.
UNEP and ELD, State of Finance for Nature, 2022	Time to act: Doubling investment by 2025 and eliminating nature-negative finance flows. The State of Finance for Nature (SFN) 2022 report quantifies public and private finance flows to nature-based solutions (NbS) to tackle global challenges related to biodiversity loss, land degradation and climate change. The SFN 2022 report reveals that if the world wants to halt biodiversity loss, limit climate change to below 1.5C and achieve land degradation neutrality by 2030, current finance flows to NbS must urgently double by 2025 and triple by 2030.
National	
The Environment Act (2021)	The Environment Act, which became law in 2021, acts as the UK’s new framework of environmental protection. The Environment Act allows the UK to enshrine better environmental protection into law. It

Document	Key Messages/ Issues
	provides the Government with powers to set new binding targets, including for air quality, water, biodiversity, and waste reduction. The Biodiversity Gain objective requires the biodiversity value attributable to a development to exceed pre-development biodiversity value by at least 10%.
HM Government, 25 Year Environment Plan, 2018	The 25 Year Environment Plan (YEP) outlines the UK Government's ambition: 'To leave our environment in a better state than we found it and the steps proposed to take to achieve that ambition.' The Plan includes ten key targets of which two focus on biodiversity. <u>Thriving plants and wildlife:</u> ■ Restoring 75% of our one million hectares of terrestrial and freshwater protected sites to favourable condition, securing their wildlife value for the long term; ■ Creating or restoring 500,000 hectares of wildlife-rich habitat outside the protected site network, focusing on priority habitats as part of a wider set of land management changes providing extensive benefits; ■ Taking action to recover threatened, iconic or economically important species of animals, plants and fungi and where possible to prevent human-induced extinction or loss of known threatened species in England and the Overseas Territories; ■ Increasing woodland in England in line with our aspiration of 12% cover by 2060: this would involve planting 180,000 hectares by end of 2042. <u>Enhancing biosecurity:</u> ■ Managing and reducing the impact of existing plant and animal diseases; lowering the risk of new ones and tackling invasive non-native species; ■ Reaching the detailed goals to be set out in the Tree Health Resilience Plan of 2018;

Document	Key Messages/ Issues
	■ Ensuring strong biosecurity protection at our borders, drawing on the opportunities leaving the EU provides; and ■ Working with industry to reduce the impact of endemic disease.
Department for Environment, Food & Rural Affairs (2023) Environmental Improvement Plan 2023	The Environmental Improvement Plan (EIP) 2023 for England is the first revision of the 25YEP. It builds on the 25YEP vision with a new plan setting out how Defra will work with landowners, communities and businesses to deliver each of the goals for improving the environment, matched with interim targets to measure progress. Taking these actions will help us restore nature, reduce environmental pollution, and increase the prosperity of our country. This improvement plan sets out the interim targets and the plan to deliver those goals, including measures such as: ■ A comprehensive delivery plan to halt the decline in nature by 2030; ■ A commitment to creating and restoring at least 500,000 hectares of wildlife habitat, with 70 new projects including 25 new or expanded National Nature Reserves; ■ A new pledge on access to nature with everyone to live no more than a 15 minutes' walk from a green or blue space; ■ The Species Survival Fund for domestic species at risk, like the red squirrel; and ■ Five-year interim targets to drive progress towards our long-term targets.
Wildlife and Countryside Act (as amended 1981)	The Wildlife and Countryside Act 1981 consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the conservation of wild birds (Birds Directive) in Great Britain (NB Council Directive 79/409/EEC has now been replaced by Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (codified version).

Document	Key Messages/ Issues
	The Act provides for the notification and confirmation of Sites of Special Scientific Interest (SSSIs) and the protection of wildlife.
Natural Environment and Rural Communities (NERC) Act 2006	Makes provision about bodies concerned with the natural environment and rural communities, wildlife, sites of special scientific interest, National Parks and the Broads, rights of way, and other functions relating to the environment and rural affairs. Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 (or the 'Biodiversity Duty') states that: "Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity". You should be able to show your duty to have regard for conserving biodiversity if you have identified ways to integrate biodiversity when you: ■ Develop policies and strategies and put them into practice ■ Manage the planning system ■ Manage: – your land and buildings – woodlands and nature reserves – gardens, parks and public open space – community amenities e.g., sports grounds and cemeteries – waste and pollution – energy and water – wood and plant products ■ Develop infrastructure, such as roads, buildings or flood defences ■ Make decisions about procurement

Document	Key Messages/ Issues
	■ Implement economic, environmental and social programmes
The Natural Environment White Paper (2011)	The aim of the White Paper is to set out a clear framework for protecting and enhancing the things that nature gives us for free. Four core themes: 1. Protecting and improving our natural environment 2. Growing a green economy 3. Reconnecting people and nature 4. International and EU leadership
Making Space for Nature: A review of England's Wildlife Sites and Ecological Network: Chaired by Professor Sir John Lawton CBE FRS (2010)	Species and habitats should be restored and enhanced in comparison with 2000 levels. Improve the long-term sustainability of ecological and physical processes that underpin the functioning of ecosystems, thereby enhancing the capacity of ecosystem services. Provide accessible natural environments rich in wildlife for people to enjoy and experience.
The Natural Choice: Securing the value of nature: HM Government (2011)	Protect and enhance biodiversity through Nature Improvement Areas (NIAs), biodiversity offsetting, Local Nature Partnerships and phasing out peat use. Place natural capital at the centre of economic decision making to avoid the unintended environmental consequences that arise from undervaluing natural assets.
National Networks National Policy	NN NPS states that development should avoid significant harm to biodiversity and geological conservation interests, including through mitigation and consideration of reasonable alternatives. The applicant may also

Document	Key Messages/ Issues
Statement (NN NPS) (2014)	wish to make use of biodiversity offsetting in devising compensation to counteract impacts on biodiversity which cannot be avoided or mitigated. Where significant harm cannot be avoided or mitigated, as a last resort, appropriate compensation measures should be sought. Paragraphs 3.2 to 3.5 of the NN NPS state that not only should national road and rail networks be designed to minimise social and environmental impacts, but that they should also seek to improve quality of life. In part this may be achieved by "reconnecting habitats and ecosystems […] improving water quality and reducing flood risk, […] and addressing areas of poor air quality." Paragraph 5.162 recognises the potential for developments to provide positive environmental and economic benefits through the provision of green infrastructure. Paragraph 5.175 of the NN NPS highlights that green infrastructure identified in development plans should be protected and, where possible, enhanced.
National Planning Policy Framework (NPPF) (2023)	Paragraphs 180 and 185 to 188 of the NPPF require development to protect and safeguard biodiversity, and advise that development should aim to conserve, restore and enhance biodiversity adequately through mitigation or, as a last resort, using compensation. Proposals which aim to conserve or enhance biodiversity should be supported. Recognise the wider benefits of ecosystem services; minimise impacts on biodiversity and provide net gains in biodiversity where possible, contributing to the UK Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures. Paragraph 180 of the NPPF requires that planning decisions should be taken to enhance the natural environment by recognising the wider benefits from natural capital and ecosystem services. Further, Paragraph 181 requires plans to take a strategic approach to maintaining and enhancing green infrastructure networks and improving natural capital at a catchment or landscape scale.

Document	Key Messages/ Issues
The State of Natural Capital: Restoring our Natural Assets; Natural Capital Committee (2014)	The report identifies that: ■ Some assets are currently not being used sustainably and the benefits that we derive from them are at risk; ■ There are major economic benefits to be gained from natural capital and that their value should be incorporated into decision making; and ■ A long-term restoration plan is necessary to maintain and improve natural capital for future generations.
The State of Natural Capital; Natural Capital Committee (2020)	In the report, the Natural Capital Committee sets out: ■ Despite some improvements, only limited progress has been made towards the 25 Year Environment Plan's goals. ■ Its advice to Government that biodiversity net gain should be expanded to environmental net gain. ■ Its advice that an England wide baseline of natural capital assets should be established to measure progress towards environmental goals. ■ Natural capital should be seen as infrastructure in its own right, in recognition of its contribution to economic wellbeing.
Local	
The London Plan 2021	Chapter 8 of the London Plan addresses Green Infrastructure and the Natural Environment. These policies outline necessary improvements to green infrastructure, protection of greenbelt and metropolitan open land, and improving biodiversity within London.
City of Westminster, City Plan 2019 – 2040	The Plan includes a specific Green Infrastructure policy that outlines the following: ■ The council will protect and enhance the city's green infrastructure to maximise its environmental, social and economic value.

Document	Key Messages/ Issues
	■ Developments will, wherever possible, contribute to the greening of Westminster by incorporating trees, green walls, green roofs, rain gardens and other green features and spaces into the design of the scheme. ■ All open spaces and their quality, heritage and ecological value, tranquillity and amenity will be protected. ■ Major developments will be required to provide new or improved public open space and space for children's active play, particularly in areas of open space or play space deficiency. ■ Development affecting the Royal Parks should enhance their quality and range of uses. ■ Sites of Importance for Natural Conservation (SINCs), priority habitats and other ecological features outside of the SINCs network will be protected. ■ Developments should achieve biodiversity net gain, wherever feasible and appropriate. Opportunities to enhance existing habitats and create new habitats for priority species should be maximised. Developments within areas of nature deficiency should include features to enhance biodiversity, particularly for priority species and habitats. ■ Trees of amenity, ecological and historic value and those which contribute to the character and appearance of the townscape will be protected. ■ The planting of trees to optimise the city's canopy cover will be encouraged in new developments.
City of Westminster, A Partnership Approach to Open Spaces and Biodiversity in Westminster (2019)	This plan aims to improve green spaces in Westminster, including improving the quantity of green assets across the city, quality of open spaces and green infrastructure, and impact of green assets, delivering a range of benefits to individuals, communities and the environment. The priorities of the plan include: ■ Protecting green space; ■ Protecting biodiversity; ■ Improving the quality of green spaces; and ■ Improving green spaces for users.

Table B-6 - Relevant Plans, Policies, Strategies and Programmes – Landscape and Townscape

Document	Key Messages/ Issues
International	
European Landscape Convention 2000 (Became binding March 2007)	The Council of Europe Landscape Convention promotes the protection, management and planning of the landscapes and organises international co-operation on landscape issues. Specific measures include: ■ Raising awareness of the value of landscapes among all sectors of society and of society's role in shaping them. ■ Promoting landscape training and education among landscape specialists, other related professions and in school and university courses. ■ The identification and assessment of landscapes. ■ Analysis of landscape change, with the active participation of stakeholders. ■ Setting objectives for landscape quality, with the involvement of the public; and ■ The implementation of landscape policies through the establishment of plans and practical programmes.
National	
25 Year Environment Plan (2018)	Goal 6: Enhancing beauty, heritage and engagement with the natural environment, is to “safeguard and enhance the beauty of our natural scenery and improving its environmental value while being sensitive to considerations of its heritage.”
National Policy Statement for National Networks (NN NPS) (2014)	Paragraph 5.149 states that when judging the impact of a project on landscape, the decision is dependent on the nature of the existing landscape likely to be affected and the nature of the effect likely to occur. The project should aim to avoid or minimise harm to the landscape, providing reasonable mitigation where possible and appropriate.

Document	Key Messages/ Issues
National Planning Policy Framework (NPPF) (2023)	Paragraph 180 of the NPPF requires developments to protect and enhance valued landscapes and recognise the intrinsic character and beauty of the countryside. Paragraph 182 of the NPPF states that great weight should be given to conserving and enhancing landscape and scenic beauty in National parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection. The scale and extent of development within all these designated areas should be limited, while development within their setting should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas. Paragraph 183 of the NPPF states that when considering applications for development within National Parks, the Broads and Areas of Outstanding Natural Beauty, permission should be refused for major development other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest.
Green Infrastructure: An integrated approach to landscape use. Landscape Institute Position Statement (2013)	The Landscape Institute's most recent position statement, 'Green Infrastructure LI Position Statement 2013' sets out why GI is crucial to our sustainable future. The publication showcases a range of successful GI projects and shows how collaboration is key to delivering multifunctional landscapes. It also illustrates why landscape professionals should take the lead on the integration of GI.
Local Green Infrastructure: helping communities make the most of their landscape: Landscape Institute for Green Infrastructure Partnership (2011)	Communities should identify green infrastructure requirements in their local area through addition to or creative enhancement of the existing network. Look to enhance local landscape character, heritage and biodiversity and ensure long term management is included in an overall strategy.

Document	Key Messages/ Issues
Guidance for Outdoor Sport and Play (2015)	Fields in Trust guidance, first published in the 1930s, is based on a broad recommendation that 6 acres (2.4 hectares) of accessible green space per 1,000 head of population enables residents of all ages to participate in sport and play; 75% of local authorities adopt this or an equivalent standard (2014 Fields in Trust / David Lock Associates Survey).
Accessible Natural Green Space Standards in Towns and Cities: A review and Toolkit for their implementation (2003) and Nature Nearby: Accessible Green Space Guidance (2010)	English Nature (now Natural England) recommends that provision should be made of at least 2 ha of accessible natural greenspace per 1000 population according to a system of tiers into which sites of different sizes fit: ■ No person should live more than 300m from their nearest area of natural greenspace; ■ There should be at least one accessible 20ha site within 2km from home; ■ There should be one accessible 100ha site within 5km; and ■ There should be one accessible 500ha site within 10km.
Local	
The London Plan 2021	The London Plan aims to make high quality development that contributes positively to London's landscapes. The plan also includes policy to protect London's strategic and local views, including London's view management framework.
City of Westminster, City Plan 2019 – 2040	The plan includes policies for high quality design, that is sensitive to local landscape and heritage assets, ensuring development positively contributes to Westminster's landscape and townscape.
The Royal Parks, Corporate Strategy 2022-2027	The vision of the strategy is: '*To provide free access to beautiful, natural and historic parks, which improve our quality of life, health and well-being – this is particularly important in a city environment'.*

Document	Key Messages/ Issues
	The plan outlines the following measures: ■ Welcome everyone: We will deepen our understanding of public needs, and make the visitor a key focus of our work; ■ Conserve and enhance: We will protect our diverse range of historic landscapes, adapt to climate change, increase biodiversity and facilitate higher visitor numbers; and ■ Build a secure future: We will build a resilient charity with a strong business model that operates in a responsible, sustainable manner and has a focus on ensuring best value. We will add new sources of funding and grow existing income streams.

Table B-7 - Relevant Plans, Policies, Strategies and Programmes – Historic Environment

Document	Key Messages/ Issues
International	
UNESCO, The World Heritage Convention, 1972	This convention sets out a framework for the identification and designation of cultural or natural heritage sites of 'outstanding universal value' as World Heritage Sites.
The Valetta Convention, 1992	This convention outlines protection measures for archaeological heritage assets, including the development and maintenance of an inventory of sites. The aim of this convention is to protect sites for future study, outlines the requirements to report 'chance finds', as well as controlling excavations. The input of expert archaeologists into the making of planning policies and decisions is also required under this convention.

Document	Key Messages/ Issues
Convention for the Protection of the Architectural Heritage of Europe, Granada (1985)	The main purpose of the Convention is to reinforce and promote policies for the conservation and enhancement of Europe's heritage. It affirms the needs for European solidarity with regard to heritage conservation and is designed to foster practical co-operation among the Parties. The convention considers comprising the following permanent properties, which are stated in Article 1: ■ Monuments: all buildings and structures of conspicuous historical, archaeological, artistic, scientific, social or technical interest, including their fixtures and fittings; ■ Groups of buildings: homogenous groups of urban or rural buildings conspicuous for their historical, archaeological, artistic, scientific, social or technical interest, which are sufficiently coherent to form topographically definable units; and ■ Sites: the combined works of man and nature, being areas which are partially built upon and sufficiently distinctive and homogenous to be topographically definable and are of conspicuous historical, archaeological, artistic, scientific, social or technical interest.
National	
National Planning Policy Framework (NPPF) (2023)	Paragraph 196 of the NPPF requires plans to set out a positive strategy for the conservation and enjoyment of the historic environment, including heritage assets most at risk through neglect, decay or other threats. Paragraph 201 of the NPPF states that local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise.

Document	Key Messages/ Issues
	Paragraph 205 of the NPPF states that when considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be).
Planning Policy Guidance – Historic Environment (2019)	This sets out broad guidelines and advice on how to enhance and conserve the historic environment through plan making and decision making.
National Policy Statement for National Networks (NN NPS) (2014)	Paragraph 5.149 states that when judging the impact of a project on landscape, the decision is dependent on the nature of the existing landscape likely to be affected and the nature of the effect likely to occur. The project should aim to avoid or minimise harm to the landscape, providing reasonable mitigation where possible and appropriate.
Ancient Monuments and Archaeological Areas Act 1979	An Act to consolidate and amend the law relating to ancient monuments; to make provision for the investigation, preservation and recording of matters of archaeological or historical interest and (in connection therewith) for the regulation of operations or activities affecting such matters; to provide for the recovery of grants under section 10 of the Town and Country Planning (Amendment) Act 1972 or under section 4 of the Historic Buildings and Ancient Monuments Act 1953 in certain circumstances; and to provide for grants by the Secretary of State to the Architectural Heritage Fund.
Planning (Listed Buildings and Conservation Areas) Act (1990)	This Act changed laws relating to the granting of planning permission for building works, with a particular focus on listed buildings and conservation areas. It created special controls for the demolition, alteration or extension of buildings, objects or structures of particular architectural or historic interest, as well as conservation areas.

Document	Key Messages/ Issues
Historic Buildings and Ancient Monuments Act 1953	An Act to provide for the preservation and acquisition of buildings of outstanding historic or architectural interest and their contents and related property, and to amend the law relating to ancient monuments and other objects of archaeological interest.
The Hedgerows Regulations (1997)	The Hedgerows Regulations 1997 protect important hedgerows by controlling their removal through a notification system. The regulations affect hedgerows which are 20 metres or more in length, or if less than 20m in length meet another hedgerow at each end. They relate to hedgerows which are on, or adjoining land used for; agriculture or forestry, the breeding or keeping of horses, ponies or donkeys, common land, village greens, Sites of Special Scientific Interest and Local Nature Reserves. Hedges in domestic gardens are not affected by the Regulations.
Levelling-up and Regeneration Act 2023	This Act allows for the amendment of the Town and Country Planning Act 1990 to require "special regard [be had] to the desirability of preserving or enhancing" the designated heritage assets set out in S.102.
Local	
The London Plan 2021	Chapter 7 of the plan focuses on heritage and culture. This includes a number of policies (HC1-HC7) aimed at protecting and enhancing London's heritage assets, including world heritage sites.
City of Westminster, City Plan 2019 – 2040	Policy 39 within the plan focuses on Westminster's historic environment. The policy states that: '*Westminster's unique historic environment will be valued and celebrated for its contribution to the quality of life and character of the city.'* The policy focuses on Westminster's world heritage site, archaeological heritage assets, parks and gardens, listed buildings, and scheduled monuments, aiming to protect and enhance these assets within the borough.

Document	Key Messages/ Issues
The Palace of Westminster and Westminster Abbey, including St Margaret's Church, World Heritage Site Management Plan (2007)	The vision for the future of the Westminster World Heritage Site is for it to be: ■ *'A living, sustainable place, where the Outstanding Universal Value and architectural, symbolic, historic and other significances are safeguarded;* ■ *Set within a public realm that is attractive and sensitive to the Outstanding Universal Value and significances of the site;* ■ *A place where people can come to work, learn, worship and visit with comfort, safety and enjoyment; and* ■ *A place where people of all nationalities and abilities can be inspired by its unique character and beauty, and its rich living history.'* There are also 28 objectives that support the vision, aimed at conserving and enhancing the site, as well as educating visitors and improving access to the world heritage site.
The Royal Parks, Corporate Strategy 2022-2027	The vision of the strategy is: '*To provide free access to beautiful, natural and historic parks, which improve our quality of life, health and well-being – this is particularly important in a city environment'.* The plan aims to protect and enhance the historic parks and gardens within London.

Table B-8 - Relevant Plans, Policies, Strategies and Programmes – Water Environment

Document	Key Messages/ Issues
International	
Directive 2000/60/EC of the European	The main aims of the Water Framework Directive (WFD) are to: ■ prevent deterioration and enhance status of aquatic ecosystems, including groundwater

Document	Key Messages/ Issues
Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy ("The Water Framework Directive")	■ promote sustainable water use ■ reduce pollution ■ contribute to the mitigation of floods and droughts The WFD requires the creation of River Basin Management Plans (RBMPs). ■ Statutory objectives are set for Scottish waters through River Basin Management Planning. These objectives are based on ecological assessments and economic judgments. The plans cover all types of water body, e.g., rivers, lochs, lakes, estuaries, coastal waters and groundwater.
Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks	Requires Member States to assess if all water courses and coast lines are at risk from flooding, to map the flood extent and assets and humans at risk in these areas and to take adequate and coordinated measures to reduce this flood risk.
Directive 2006/118/EC of the European Parliament and of the Council of 12 December 2006 on the protection of groundwater against pollution and deterioration	This Directive establishes a regime which sets groundwater quality standards and introduces measures to prevent or limit inputs of pollutants into groundwater. The directive establishes quality criteria that takes account local characteristics and allows for further improvements to be made based on monitoring data and new scientific knowledge.

Document	Key Messages/ Issues
National	
National Planning Policy Framework (NPPF) (2023)	Paragraph 165 "… inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere".
The Environment Act (2021)	The Environment Act, which became law in 2021, acts as the UK's new framework of environmental protection. The Environment Act allows the UK to enshrine better environmental protection into law. It provides the Government with powers to set new binding targets, including for air quality, water, biodiversity, and waste reduction. Objectives for targets under consideration ■ reduce pollution from agriculture, in particular phosphorus and nitrate ■ reduce pollution from wastewater, in particular phosphorus and nitrate ■ reduce water demand ■ improve the quality of habitat on land, including freshwater and coastal sites, expressed through the condition of our protected sites (SSSIs) ■ improve the overall status of species populations on land and in freshwaters
National Policy Statement for National Networks (2014)	Paragraph 5.105 "… if there is no reasonably available site in Flood Zones 1 or 2, then national networks infrastructure projects can be located in Flood Zone 3, subject to the Exception Test. Both elements of the test will have to be passed for development to be consented…" Paragraph 5.109 "Any project that is classified as 'essential infrastructure' and proposed to be located in Flood Zone 3a or 3b should be designed and constructed to remain operational and safe for users in times

Document	Key Messages/ Issues
	of flood; and any project in Zone 3b should result in no net loss of floodplain storage and not impede water flows". Paragraph 5.224 "Activities that discharge to the water environment are subject to pollution control" Paragraph 5.225 "… impacts on the water environment should be given more weight where a project would have adverse effects on the achievement of the environmental objectives established under the Water Framework Directive".
A Green Future: Our 25 Year Plan to Improve the Environment (2018) - Goal 2 'Clean and plentiful water'	"Improve at least three quarters of our waters to be close to their natural state as soon as is practicable by: […] Reaching or exceeding objectives for rivers, lakes, coastal and ground waters that are specially protected, whether for biodiversity or drinking water".
Water Targets: Detailed Evidence Report, Department for Environment Food and Rural Affairs (2022)	The Environment Agency regularly assesses the water quality of the UK's waterbodies, however many of these are not achieving the required standards and are often prevented by a number of factors and are described as 'Reasons for Not Achieving Good Status (RNAGS)'. Such pressures include pollution from towns, cities and transport affecting 18% of water bodies.
Flood Risk Regulations (2009)	The Flood Risk Regulations 2009 was created to transpose the EU Floods Directive (Directive 2007/60/EC) into domestic law in England and Wales. The Floods Directive provides a framework to assess and manage flood risks in order to reduce adverse consequences for human health, the environment (including cultural heritage) and economic activity.
Flood and Water Management Act (2010)	The Flood and Water Management Act 2010 requires Risk Management Authorities to: ■ co-operate with each other.

Document	Key Messages/ Issues
	■ act in a manner that is consistent with the National Flood and Coastal Erosion Risk Management Strategy for England and the local flood risk management strategies developed by Lead Local Flood Authorities ■ exchange information. Risk Management Authorities have flexibility to form partnerships and to act on behalf of one another.
Local	
Environment Agency, Thames Catchment Flood Management Plan (2009)	The CFMPs aim to promote more sustainable approaches to managing flood risk. The policies identified in the CFMP will be delivered through a combination of different approaches. Together with our partners, we will implement these approaches through a range of delivery plans, projects and actions. The CFMP outlines six different policy options to be applied within sub-areas of the Thames Catchment, aimed at reducing flood risk and increasing flood risk resilience within these areas.
The London Plan 2021	Policy SI12 of the London Plan outlines the requirements for new developments to reduce flood risk within London.
City of Westminster, City Plan 2019 – 2040	Policy 35 of the Plan outlines the requirements for new developments to reduce flood risk and mitigate impact from future flood risk within development.

Table B-9 - Relevant Plans, Policies, Strategies and Programmes – Air Quality and Greenhouse Gases

Document	Key Messages/ Issues
International	
Ambient Air Quality Directive (2008)	The Ambient Air Quality Directive provides the current framework for the control of ambient concentrations of air pollution in the EU. The control of emissions from mobile sources, improving fuel quality and promoting and integrating environmental protection requirements into the transport and energy sector are part of these aims.
National	
The Environment Act (2021)	The Environment Act, which became law in 2021, acts as the UK's new framework of environmental protection. The Environment Act allows the UK to enshrine better environmental protection into law. It provides the Government with powers to set new binding targets, including for air quality, water, biodiversity, and waste reduction. Objectives for targets under consideration: ■ Reducing the annual mean level of fine particulate matter (PM2.5) in ambient air (as required by the Environment Bill) ■ In the long-term, reducing population exposure to PM2.5
25 Year Environment Plan, HM Government (2018)	With regards to the transport sector, the 25 Year Environment Plan identifies four 'early' priorities through the 'Future of Mobility Grand Challenge'. These include encouraging new modes of transport; addressing the challenges of moving from hydrocarbon to zero emission vehicles; and Preparing for a future of new mobility services, increased autonomy, journey-sharing and a blurring of the distinctions between private and public transport.
The Clean Growth Strategy (2017)	This Strategy sets out a comprehensive set of policies and proposals that aim to accelerate the pace of "clean growth", i.e. deliver increased economic growth and decreased emissions.

Document	Key Messages/ Issues
	Key Policies and Proposals in the Strategy: ■ Develop world leading Green Finance capabilities; ■ Develop a package of measures to support businesses to improve their energy ■ productivity, by at least 20 per cent by 2030; ■ Improving the energy efficiency of our homes; ■ Rolling out low carbon heating; ■ Accelerating the shift to low carbon transport; ■ Delivering clean, smart, flexible power emissions; and ■ Enhancing the benefits and value of our natural resources.
National Policy Statement for National Networks (2014)	Paragraph 5.12 - Accords air quality considerations substantial weight where, after taking into account mitigation, a scheme would lead to a significant air quality impact in relation to Environmental Impact Assessment (EIA) and/ or where they lead to deterioration in air quality in a zone/ agglomeration.
Clean Air Strategy (2019)	Addresses action to reduce emissions from transport “as a significant source of emissions of air pollution”, in-particular oxides of nitrogen (NOx) – which is responsible for high levels of NO2 in ambient air, especially in urban areas - and particulate (PM10 and PM2.5) emissions.
Local	
City of Westminster, Air Quality Action Plan 2019-2024	The council’s vision for Westminster’s air quality is for everyone who lives, works and visits the city to have clean and breathable air. To achieve this, we need to work holistically and collaboratively across the council and with a variety of external stakeholders including residents, businesses and other levels of government. The five categories of action for air quality within the plan are: ■ Monitoring ■ Reducing emissions from buildings and new development

Document	Key Messages/ Issues
	■ Reducing emissions from transport ■ Raising awareness ■ Lobbying and partnership working
The London Plan 2021	Policy SI2 of the plan focusses on Minimising greenhouse gas emissions. The policy states that major development should be net zero-carbon. This means reducing greenhouse gas emissions in operation and minimising both annual and peak energy demand in accordance with the following energy hierarchy: ■ be lean: use less energy and manage demand during operation ■ be clean: exploit local energy resources (such as secondary heat) and supply energy efficiently and cleanly ■ be green: maximise opportunities for renewable energy by producing, storing and using renewable energy on-site ■ be seen: monitor, verify and report on energy performance. The plan also includes requirements to reduce carbon emissions within major developments.
City of Westminster, City Plan 2019 – 2040	Policy 36 within the Plan includes promoting zero carbon development and expects all development to reduce on-site energy demand and maximise the use of low carbon energy sources to minimise the effects of climate change.

Table B-10 - Relevant Plans, Policies, Strategies and Programmes – Climatic Factors

Document	Key Messages/ Issues
International	

Document	Key Messages/ Issues
Kyoto Protocol to the UN Framework Convention on Climate Change (1992) Doha Amendment to the Kyoto Protocol (2012)	Developed countries commit themselves to reducing their collective emissions of six key greenhouse gases by at least 5%. Each country's emissions target must be achieved by the period 2008-2012. Doha Amendment saw parties commit to reduce GHG emissions by at least 18 percent below 1990 levels in the eight-year period from 2013 to 2020.
The Paris Agreement, 2015	Aims to limit the global warming change to below 2°C above pre-industrial levels. However, countries aim to limit the increase to 1.5°C to reduce the impacts of global warming. The EU has committed to a binding target of a reduction of at least 40% in greenhouse gas emissions by 2030 compared to 1990.
National	
Environment Act (2021)	An Act to make provision about targets, plans and policies for improving the natural environment; for statements and reports about environmental protection; for the Office for Environmental Protection; about waste and resource efficiency; about air quality; for the recall of products that fail to meet environmental standards; about water; about nature and biodiversity; for conservation covenants; about the regulation of chemicals; and for connected purposes.
25 Year Environment Plan	This 25 Year Environment Plan sets out government action to help the natural world regain and retain good health. It aims to deliver cleaner air and water in our cities and rural landscapes, protect threatened species and provide richer wildlife habitats.
Local	
City of Westminster, Zero Carbon City 2040,	This Climate Emergency Action Plan for Westminster sets out a framework for collective action on climate change to achieve the ambitious target of achieving net zero emissions across the borough by 2040. In

Document	Key Messages/ Issues
Westminster Climate Emergency Action Plan	doing so, it seeks to harness the significant benefits of climate action to the health and wellbeing of our communities, economy, and natural environment. The Plan aims to accelerate carbon emission reductions and associated improvements in air quality across the city, through a comprehensive set of actions across five themes: ■ Efficient buildings; ■ Clean and affordable energy; ■ Sustainable travel and transport; ■ Reduced consumption and waste; and ■ Green and resilient city.
City of Westminster, City Plan 2019 – 2040	Policy 36 within the Plan includes promoting zero carbon development and expects all development to reduce on-site energy demand and maximise the use of low carbon energy sources to minimise the effects of climate change. The policy also considers heat networks, and states: '*developments should be designed in accordance with the Mayor of London's heating hierarchy. Major developments must connect to existing or planned local heat networks, or establish a new network, wherever feasible'.* Additionally, the policy considers overheating *'All developments should be designed and operated to minimise the risk of internal overheating. Major development proposals will include a cooling strategy in line with the Mayor of London's cooling hierarchy.'*

Table B-11 - Relevant Plans, Policies, Strategies and Programmes – Material Assets

Document	Key Messages/ Issues
National	
Environment Act (2021)	The Environment Act, which became law in 2021, acts as the UK's new framework of environmental protection. The Environment Act allows the UK to enshrine better environmental protection into law. It provides the Government with powers to set new binding targets, including for air quality, water, biodiversity, and waste reduction. Objectives for targets under consideration: ■ increase resource productivity ■ reduce the volume of 'residual' waste we generate
The England Trees Action Plan 2021	This action plan will help to shape the kind of country future generations will want to live in, alive with the formidable power of healthy trees. England will have at least 12% woodland cover by mid-century, contributing to net zero greenhouse gas emissions. Its conifer and broadleaf woodlands will be managed for biodiversity and other environmental benefits, along with providing sustainable sources of hardwood and softwood timber and woody products, which can be effective carbon stores and are already seeing increased demand for as we transition to a green economy.
Local	
City of Westminster, City Plan 2019 – 2040	The Connections section of the plan focuses on transport within Westminster and aims to promote sustainable travel and more 'joined-up' public transport options and greater use of waterways within Westminster. The plan also promotes 'active travel', to make Westminster a walkable city.

Document	Key Messages/ Issues
	Policy 36 within the Plan includes promoting zero carbon development and expects all development to reduce on-site energy demand and maximise the use of low carbon energy sources to minimise the effects of climate change. Policy 37 in the plan focuses on waste management, and states that the council will promote the Circular Economy and contribute to the London Plan targets for recycling and for London's net self-sufficiency by 2026.
The London Plan 2021	Chapter 10 of the Plan focusses on transport, improving sustainable transport connectivity, including active travel, as well as improving transport infrastructure within London.
Westminster City Council, Sustainable Transport Strategy (yet to be adopted)	WCC's Sustainable Transport Strategy is currently being developed and is in the public consultation phase of development.

Appendix C

LFRMS Measures and Action Plan Assessment

Public

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Introduction

1.1.1. The assessment of Measures and Actions has been grouped by Measure and is shown in **Table C-2** to **Table C-15**, below.

1.1.2. The assessment of the polices will predict the following:

- Overall effect significance (negative, positive, uncertain, both positive and negative or negligible);
- Nature of effect (direct, indirect);
- Spatial extent (local, regional, national, international);
- Reversibility of effect:
  - Reversible: The receptor can return to baseline condition without significant intervention;
  - Irreversible: The receptor would require significant intervention to return to baseline condition.
- Duration (short, medium or long term) – Short term: 0-5 years, Medium term: 5-10 years (up to the end of the plan period) Long term: 10+ years (beyond the plan period).

1.1.3. **Table C-1** below shows the key to effects that have been used within the assessments below. It should be noted that where uncertain and neutral effects have been identified, it has not been possible to determine the nature of effect, the spatial extent, the reversibility or the duration of effect. In this instance, these cells have been left blank.

Table C-1 - Key to Effects

Effect Significance	Key
Potential for significant positive effects	++
Potential for minor positive effects	+
Potential for minor negative effects	-
Potential for significant negative effects	--
Potential for both positive and negative effects	+/-
Uncertain effects	?
Negligible / No effect	0
Nature of effect (direct / indirect)	D / I

Effect Significance	Key
Spatial extent (local / regional / national / international)	L / R / N / I
Reversibility of effect (reversible / irreversible)	R / I
Duration (short / medium / long term)	ST / MT / LT

1.1.4. Measures and Actions have been grouped as follows:

Objective	Measure	Action
Objective 1	Create an integrated record of historic flooding and sources of flood risk in Westminster through data collection.	1.1.1 Develop and maintain a central GIS database of flood risk from all sources and historic flooding, and flood management assets in Westminster.
		1.1.2 Collect tangible data on areas at risk, historic events, and flood management assets by engaging with internal departments, risk management authorities, landowners and asset owners.
		1.1.3 Collect tangible data on historic flood events from community groups through direct engagement.
		1.1.4 Actively engage with community groups after major storms to record relevant impacts.
		1.1.5 Develop an online mapping platform for flood sources, assets and upcoming FRM projects.
Objective 1	Quantify, visualise and communicate risk to understand the exposure to risk and the cost that this may incur to businesses, residents and communities.	1.2.1 Develop written and / or digital materials which help visualise risk and quantify potential costs, both financial and to well being.
		1.2.2 Promote materials produced to quantify risk to communities and partners through and engagement plan.
Objective 1	Engage with local forums, residents associations, communities, businesses and social enterprise to provide further information in relation to flood risk management.	1.3.1 Create an educational data hub for flood risk safety, featuring videos and infographics.
		1.3.2 Update the website to signpost communities and residents to the appropriate resources and actions to take.
		1.3.2 Create a targeted community engagement strategy and circulate internally and externally.
		1.3.3 Provide education for short term residents / lettings about flood risk in Westminster, through information pamphlets and periodic review.
		1.3.4 Regularly attend local neighbourhood forums, resident associations, business groups in the communities and community group events to discuss flood risk issues. Minimum of three per year.
Objective 1	Promote a better understanding of flood risk with partners through information sharing and engage in stronger collaboration efforts.	1.4.1 Improve collaboration between Westminster and Thames Water to share knowledge, including upcoming schemes and strategies through a quarterly check in.
		1.4.2 Collaborate with the London Fire Brigade annually at their community open days to provide information on flood risk, to deliver an integrated information service.
		1.4.3 Collaborate with schools to develop a flood risk program to educate and improve flood risk knowledge in partnership with neighbouring boroughs and organisations.
Objective 2	Increase opportunities for biodiversity, ecosystem services or urban greening to complement water management in Westminster.	2.1.1 Clearly identify targets and opportunities for biodiversity net gain in Westminster.
		2.1.2 Produce a 'developer guide' on achieving multiple benefits within a development scheme.
Objective 2	Continue to implement public realm SuDS with target to attenuate 15% of water above the surface for a 1:30yr event (3.33% AEP) from the SuDS Catchments by 2030.	2.2.1 Engage with Westminster internal teams to develop the integration of SuDS into Westminster owned properties.
		2.2.2 Develop standard details for different SuDS elements for easy integration into Westminster's public realm and highways schemes.
		2.2.3 Provide design advice for ongoing public realm and highways schemes.
		2.2.4 Develop SuDS masterplan for the SuDS Catchments, to identify potential areas within Westminster which would be suitable for SuDS and provide flood risk and wider benefits.

Objective	Measure	Action
		2.2.5 Retrofit SuDS within the identified SuDS Catchments.
		2.2.6 Establish requirement for all major planning applications to submit a verification report detailing SuDS installed and storage volumes.
		2.2.7 Develop and maintain a GIS database of all SuDS features and storage volumes across Westminster.
		2.2.8 Develop targeted policy to encourage rainwater harvesting / reuse.
		2.2.9 Develop innovative solutions to remove Surface Water Runoff from the Thames Water Combined Sewer System including assessing the opportunity to establish a separate surface water sewer in Westminster by 2050.
		2.2.10 Develop a standardised maintenance and management plan (including estimated costs and maintenance schedules) for SuDS implemented in Westminster's public realm and highways.
Objective 2	Connect complimentary internal and London-wide strategies (including the London Surface Water Strategy) to ensure maximised flood risk and wider environmental benefits are realised.	2.3.1 Engage with Westminster internal teams to highlight the wider benefits of SuDS and an integrated approach.
		2.3.2 Review sources of funding with partners on a quarterly basis to identify opportunities for joint benefits.
		2.3.3 Review internal and external strategies on a quarterly basis for opportunities to collaborate with other internal departments in Westminster and other RMAs.
		2.3.4 Work with relevant partners and stakeholders to develop a joint Thames Riverside Strategy by 2030 in line with the Thames Estuary 2100 Plan.
Objective 3	Implement a system of identifying, contacting and providing support to residents before, during and after flood events by 2026.	3.1.1 Identify residents that are at risk of surface water flooding and provide them with detailed information for support during a flood event.
		3.1.2 Update the WCC website to include a dashboard of all extreme weather events, flood risk and a virtual warning system.
		3.1.3 Utilise social media to issue flood alerts and warnings during flood events.
		3.1.4 Develop text warning system that can be signed up to for severe weather.
		3.1.5 Provide support to most affected communities after a flood event through personal contact and online information.
Objective 3	Improve resilience and recovery amongst partners, businesses and communities.	3.2.1 Provide information on WCC website for improving property resilience and preparing for flooding.
		3.2.2 Provide information on WCC website for recovery after a flood event.
		3.2.3 Work with Thames Water to understand how they would prefer flood events to be reported and communicate this to businesses and communities.
		3.2.4 Carry out Section 19 investigations within 4 weeks following a flood events that triggers the S19 threshold.
Objective 4	Streamline local planning guidance and clarify necessary documentation for all developments by 2025.	4.1.2 Update the WCC website regularly with the relevant planning guidance and documents. This includes developer checklists, updating and keeping the SFRA under review.
		4.1.3 Keep a database of new incoming planning applications for basement developments to provide an indication of where there is a lot of basement development coming forward.
		4.1.4 Ensure the GLA GIS database of basements is up to date.

Objective	Measure	Action
Objective 4	Ensure all new developments consider SuDS, with preference to above ground SuDS by 2025.	4.2.1 Update planning guidance for developers to ensure that flood risk and SuDS are considered in all new developments, with preference for above ground SuDS.
Objective 5	Engage in regional networks for sharing of knowledge and best practice.	5.1.1 Regular attendance (quarterly) at the Central London North Flood Risk Partnership Group and LoDEG.
		5.1.2 Disseminate regional updates internally on a regular basis through LLFA meetings and email.
Objective 5	Work with other RMAs and risk management stakeholders to engage communities.	5.2.1 Ensure pertinent information from local neighbourhood forums is disseminated to Westminster stakeholders.
		5.2.2 WCC will Jointly attend at least two public events in local communities per year with other RMAs.
Objective 5	Encourage the involvement of communities and businesses in Flood Risk Management.	5.3.1 Identify opportunities for joint funded community resilience projects. Review on a quarterly basis.
		5.3.2 Engage with community groups about upcoming FRM schemes and their areas of concern through attendance of their meetings and specific engagement events.
		5.3.3. Support and promote the establishment of community flood wardens in the most at risk areas.
		5.3.3 Establish an online system for reporting flood incidents in Westminster.

Objective 1

Measure 1.1

Table C-2 - Assessment of Measure 1.1 and Actions

Objective	Objective 1							
Measure	Create an integrated record of historic flooding and sources of flood risk in Westminster through data collection.							
Actions	1.1.1 Develop and maintain a central GIS database of flood risk from all sources and historic flooding, and flood management assets in Westminster. 1.1.2 Collect tangible data on areas at risk, historic events, and flood management assets by engaging with internal departments, risk management authorities, landowners and asset owners. 1.1.3 Collect tangible data on historic flood events from community groups through direct engagement. 1.1.4 Actively engage with community groups after major storms to record relevant impacts. 1.1.5 Develop an online mapping platform for flood sources, assets and upcoming FRM projects.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
SEA1: Population & Human Health	+	M	D	L	R	P	ST/LT	This measure and actions are likely to result in improved community engagement initiatives, improving knowledge and awareness of flood risks, as well as improved flood risk resilience. It is anticipated that those who are living in areas of flood risk will be informed by these GIS and mapping platforms and take part in subsequent resilience measures.
SEA2: Economy	+	M	D	L	R	P	ST/LT	Minor positive effects have been identified for economy as it is anticipated that the collection of data and engagement with local businesses is likely to result in improvements to resilience to flooding. This is also likely to result in reduced economic damage to businesses through increased awareness and understanding of flood risks.
SEA3: Biodiversity	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA4: Landscape and Townscape	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA5: Historic Environment	+	M	I	L	R	P	MT/LT	Indirectly, it is anticipated that there is potential for these actions to improve the local historic environment. The data collected is likely to be shared with managers of local heritage assets and therefore utilised in developing flood risk mitigation measures, protecting not only heritage assets but also their settings.
SEA6: Water Environment	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Objective	Objective 1							
Measure	Create an integrated record of historic flooding and sources of flood risk in Westminster through data collection.							
Actions	1.1.1 Develop and maintain a central GIS database of flood risk from all sources and historic flooding, and flood management assets in Westminster. 1.1.2 Collect tangible data on areas at risk, historic events, and flood management assets by engaging with internal departments, risk management authorities, landowners and asset owners. 1.1.3 Collect tangible data on historic flood events from community groups through direct engagement. 1.1.4 Actively engage with community groups after major storms to record relevant impacts. 1.1.5 Develop an online mapping platform for flood sources, assets and upcoming FRM projects.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
SEA7: Climate Change	+	M	D/I	L	R	P	MT	Utilising data from historic flood events is likely to result in improvements to climate resilience within Westminster. Historic flood events are indicative of the potential damage that may be caused by future events. However, this can also be exacerbated by climate change. Therefore, gathering historic data can be used to accurately inform decision-making to develop improved climate resilience within the Borough.
SEA8: Flood Risk	+	M	D/I	L	R	P	MT	Utilising data from historic flood events is likely to result in improvements to reduce the vulnerability of Westminster to flood events. Historic flood events are indicative of the potential damage that may be caused by future events. Therefore, gathering historic data can be used to accurately inform decision-making to develop improved flood risk resilience within the Borough.
SEA9: Transport and Critical Infrastructure	+	L	I	L	R	P	MT/LT	The collection of local flood risk data and the development of online mapping and GIS database has the potential to result in indirect positive effects upon transport and critical infrastructure if this data is utilised within flood risk resilience measures to locate flood defences/mitigation measures in areas of vulnerability, reducing severance of this infrastructure during flood events.
SEA10: Soils	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Potential Cumulative / Synergistic Effects	**SEA1:** Potential positive cumulative effects arising from improved engagement and flood resilience in communities. **SEA2:** Potential positive cumulative effects arising from improved business resilience. **SEA5:** Potential positive cumulative effects from improved flood risk protection for local heritage assets. **SEA7:** Potential positive cumulative effects arising from improved climate resilience and knowledge of future flood risk. **SEA8:** Potential positive cumulative effects from improved flood knowledge and flood risk resilience measures. **SEA9:** Potential positive cumulative effects arising from improved knowledge, developing suitable flood defences for vulnerable infrastructure.							
Mitigation and Enhancement Measures	**SEA1/SEA8:** Recording of effects of flooding on the community should be utilised to inform support and decision making, developing appropriate support networks and interventions that will minimise flood risk to those most vulnerable to flooding. Engagement should be undertaken in a number of different formats to ensure that all groups can contribute.							

Objective	Objective 1							
Measure	Create an integrated record of historic flooding and sources of flood risk in Westminster through data collection.							
Actions	1.1.1 Develop and maintain a central GIS database of flood risk from all sources and historic flooding, and flood management assets in Westminster. 1.1.2 Collect tangible data on areas at risk, historic events, and flood management assets by engaging with internal departments, risk management authorities, landowners and asset owners. 1.1.3 Collect tangible data on historic flood events from community groups through direct engagement. 1.1.4 Actively engage with community groups after major storms to record relevant impacts. 1.1.5 Develop an online mapping platform for flood sources, assets and upcoming FRM projects.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
Recommendations	No recommendations have been identified for these Actions.							

Measure 1.2

Table C-3 - Assessment of Measure 1.2 and Actions

Objective	Objective 1							
Measure	1.2 Quantify, visualise and communicate risk to understand the exposure to risk and the cost that this may incur to businesses, residents and communities.							
Actions	1.2.1 Develop written and / or digital materials which help visualise risk and quantify potential costs, both financial and to well being. 1.2.2 Promote materials produced to quantify risk to communities and partners through and engagement plan.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
SEA1: Population & Human Health	+	L	D	L	R	P	MT	This measure and actions are likely to result in improved community engagement initiatives, improving knowledge and awareness of flood risks. There are also anticipated to be positive effects arising from improved flood risk resilience.
SEA2: Economy	+	L	D	L	R	P	MT	This measure and actions are likely to result in improved engagement with business owners, improving knowledge and awareness of flood risks, which may help inform business decisions making.
SEA3: Biodiversity	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA4: Landscape and Townscape	+	L	I	L	R	P	MT	The Royal Parks are a partner of WCC. Therefore, quantifying the risks and cost of flooding is likely to help in the development of increased flood risk resilience measures, protecting Westminster's local parks and landscapes.
SEA5: Historic Environment	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA6: Water Environment	+	L	I	L	R	P	MT	The Port of London is a partner of WCC. Therefore, quantifying the risks and cost of flooding and identifying where key issues exist is likely to help in the development of increased flood risk resilience measures, protecting Westminster's water environment and reducing the likelihood of flooding leading to increased pollution.
SEA7: Climate Change	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA8: Flood Risk	++	H	D	L	R	P	LT	Significant positive effects are identified for flood risk as a result of the measure and actions. There is potential that the development of materials quantifying flood risk and identifying where key issues exist may be applied to developments and therefore reduce flood risk throughout the Borough.
SEA9: Transport and Critical Infrastructure	+	L	I	L	R	P	MT	National Rail are a partner of WCC, and it is anticipated that the promotion of materials improving flood risk resilience will contribute to improved resilience of the rail network to flooding, minimising severance of rail services during flood events.
SEA10: Soils	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Objective	Objective 1							
Measure	1.2 Quantify, visualise and communicate risk to understand the exposure to risk and the cost that this may incur to businesses, residents and communities.							
Actions	1.2.1 Develop written and / or digital materials which help visualise risk and quantify potential costs, both financial and to well being. 1.2.2 Promote materials produced to quantify risk to communities and partners through and engagement plan.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
Potential Cumulative / Synergistic Effects	**SEA1:** Potential positive cumulative effects arising from improved community engagement, **SEA4:** Potential positive cumulative effects upon landscape as a result of communication with The Royal Parks. **SEA6:** Potential positive cumulative effects on water quality as a result of communication with the Port of London. **SEA8:** Potential positive cumulative effects as a result of improved flood risk resilience. **SEA9:** Potential positive cumulative effects upon transport and critical infrastructure as a result of improved resilience, potentially reducing the effects of flooding on service severance.							
Mitigation and Enhancement Measures	**SEA1:** Materials should be developed in both written and digital modes and distributed not only on social media, to ensure it is accessible by all members of the communities at risk. Similarly, data visualisations should be publicly available and free to access for those who may not have access to a computer or smart phone (e.g. using public libraries or council offices).							
Recommendations	The actions could be consider including materials of support for those affected financially by flooding.							

Measure 1.3

Table C-4 - Assessment of Measure 1.3 and Actions

Objective	Objective 1							
Measure	1.3 Engage with local forums, residents associations, communities, businesses and social enterprise to provide further information in relation to flood risk management.							
Actions	1.3.1 Create an educational data hub for flood risk safety, featuring videos and infographics. 1.3.2 Update the website to signpost communities and residents to the appropriate resources and actions to take. 1.3.2 Create a targeted community engagement strategy and circulate internally and externally. 1.3.3 Provide education for short term residents / lettings about flood risk in Westminster, through information pamphlets and periodic review. 1.3.4 Regularly attend local neighbourhood forums, resident associations, business groups in the communities and community group events to discuss flood risk issues. Minimum of three per year.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
SEA1: Population & Human Health	+	M	D	L	R	P	ST/LT	This measure and actions are likely to result in improved community engagement initiatives, improving knowledge and awareness of flood risks. There are also anticipated to be positive effects arising from improved flood risk resilience education, reducing the distress caused by the effects of flooding.
SEA2: Economy	+	M	D	L	R	P	ST/LT	Minor positive effects have been identified for economy as it is anticipated that the engagement with local businesses is likely to result in improvements to resilience to flooding and awareness of flood risk. This has potential to result in reduced economic damage to businesses through increased awareness.
SEA3: Biodiversity	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA4: Landscape and Townscape	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA5: Historic Environment	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA6: Water Environment	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA7: Climate Change	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA8: Flood Risk	+	L	I	L	I	P	LT	Increased levels of awareness and education may help to reduce the overall vulnerability to flooding and ensure the community is better prepared.
SEA9: Transport and Critical Infrastructure	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA10: Soils	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Objective	Objective 1							
Measure	1.3 Engage with local forums, residents associations, communities, businesses and social enterprise to provide further information in relation to flood risk management.							
Actions	1.3.1 Create an educational data hub for flood risk safety, featuring videos and infographics. 1.3.2 Update the website to signpost communities and residents to the appropriate resources and actions to take. 1.3.2 Create a targeted community engagement strategy and circulate internally and externally. 1.3.3 Provide education for short term residents / lettings about flood risk in Westminster, through information pamphlets and periodic review. 1.3.4 Regularly attend local neighbourhood forums, resident associations, business groups in the communities and community group events to discuss flood risk issues. Minimum of three per year.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
Potential Cumulative / Synergistic Effects	**SEA1:** Potential positive cumulative effects arising from improved engagement and flood resilience in communities. **SEA2:** Potential positive cumulative effects arising from improved business resilience.							
Mitigation and Enhancement Measures	**SEA1:** Materials should be developed in both written and digital modes and distributed not only on social media, to ensure it is accessible by all members of the communities at risk. The data hub should be publicly available and free to access for those who may not have access to a computer or smart phone (e.g. using public libraries or council offices). **SEA1:** Materials should be developed in a non-technical manner and a variety of languages so that a wider range of social groups will be able to understand the information.							
Recommendations	No recommendations have been identified for these Actions.							

Measure 1.4

Table C-5 - Assessment of Measure 1.4 and Actions

Objective	Objective 1							
Measure	Promote a better understanding of flood risk with partners through information sharing and engage in stronger collaboration efforts.							
Actions	1.4.1 Improve collaboration between Westminster and Thames Water to share knowledge, including upcoming schemes and strategies through a quarterly check in. 1.4.2 Collaborate with the London Fire Brigade annually at their community open days to provide information on flood risk, to deliver an integrated information service. 1.4.3 Collaborate with schools to develop a flood risk program to educate and improve flood risk knowledge in partnership with neighbouring boroughs and organisations.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
SEA1: Population & Human Health	+	M	D	L	R	P	ST/LT	This measure and actions are likely to result in improved community engagement initiatives, improving knowledge and awareness of flood risks. There are also anticipated to be positive effects arising from improved flood risk resilience education for children, reducing the distress caused by the effects of flooding.
SEA2: Economy	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA3: Biodiversity	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA4: Landscape and Townscape	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA5: Historic Environment	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA6: Water Environment	+	M	D	R	R	P	MT/LT	Collaboration between Thames Water and WCC is likely to result in improved water quality. Knowledge sharing and the joint development of strategies and schemes is anticipated to lead to a more joined-up approach to decision making and result in improved water quality across Westminster and the wider London area.
SEA7: Climate Change	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA8: Flood Risk	+	M	D	R	R/I	P	MT/LT	Minor positive effects have been identified for these actions as collaboration between Thames Water and WCC is likely to result in improved flood risk resilience measures, including flood defences and knowledge sharing about flood events. This is likely to result in reduced effects of flood risk in Westminster and the wider London area.
SEA9: Transport and Critical Infrastructure	+	M	D	R	R	P	LT	Network Rail are a partner of the LFRMS, resulting in minor positive effects anticipated for the transport on main railway lines within Westminster. Improving understanding of flood risk in Westminster is likely to improve the resilience of the transport network through leading to improvements to track

Objective	Objective 1							
Measure	Promote a better understanding of flood risk with partners through information sharing and engage in stronger collaboration efforts.							
Actions	1.4.1 Improve collaboration between Westminster and Thames Water to share knowledge, including upcoming schemes and strategies through a quarterly check in. 1.4.2 Collaborate with the London Fire Brigade annually at their community open days to provide information on flood risk, to deliver an integrated information service. 1.4.3 Collaborate with schools to develop a flood risk program to educate and improve flood risk knowledge in partnership with neighbouring boroughs and organisations.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
								management of flood risk, reducing the likelihood of flooding stopping and or delaying rail services within the borough.
SEA10: Soils	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Potential Cumulative / Synergistic Effects	**SEA1:** Potential positive cumulative effects arising from improved engagement and flood resilience in communities. **SEA4/SEA5/SEA9/SEA10:** Potential positive cumulative effects as a result of improved flood risk resilience. **SEA6:** Potential positive cumulative effects upon water quality. **SEA8:** Potential positive cumulative effects on flood risk, improving flood resilience measures.							
Mitigation and Enhancement Measures	No mitigation or enhancement measures have been identified for these actions.							
Recommendations	Action 1.4.1 could consider expanding to include joining up of upcoming schemes and strategies to ensure a cohesive approach to flood risk.							

Objective 2

Measure 2.1

Table C-6 - Assessment of Measure 2.1 and Actions

Objective	Objective 2							
Measure	2.1 Increase opportunities for biodiversity, ecosystem services or urban greening to complement water management in Westminster.							
Actions	2.1.1 Clearly identify targets and opportunities for biodiversity enhancement in Westminster. 2.1.2 Produce a 'developer guide' on achieving multiple benefits within a development scheme.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
SEA1: Population & Human Health	+	L	I	L	R	P	LT	There are anticipated to be indirect positive effects upon heath as a result of urban greening. This is anticipated to improve open spaces and local biodiversity, contributing to improved mental wellbeing and physical health, encouraging physical activity in open spaces.
SEA2: Economy	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA3: Biodiversity	++	H	D	L	R	P	MT	Significant positive effects have been identified for biodiversity as a result of these actions, predominantly 2.1.1. This action identifies targets and opportunities for biodiversity enhancement in Westminster. This is likely to result in further biodiversity enhancement as a result of interventions arising from the LFRMS, leading to improved habitats and species in the Borough.
SEA4: Landscape and Townscape	+	M	I	L	R	P	MT	There are anticipated to be indirect positive effects upon landscape and townscape as a result of action 2.1.1. The improvement and enhancement of local biodiversity has potential to result in positive effects on the local landscape from enhanced planting and habitats that may be developed in the Borough.
SEA5: Historic Environment	?	N/A	N/A	N/A	N/A	N/A	N/A	Uncertain effects have been identified for the historic environment as It is currently unclear if guides on the historic environment will be included within the 'developer guide' in action 2.1.2. Green infrastructure if designed well has the potential to improve the setting of heritage assets.
SEA6: Water Environment	+	M	I	R	R	P	MT	It is anticipated that improving green infrastructure through this measure and actions may result in reduced surface runoff within Westminster. This is likely to improve infiltration and reduce the amount of pollutants running into Westminster's water bodies, improving the quality of these water bodies.
SEA7: Climate Change	+	H	I	L	R	P	LT	Minor positive effects have been identified for climate as implementing biodiversity enhancement measures in the Borough is likely to result in improved climate resilience, improved drainage and reduced urban heat island effect in the Borough. There is also potential for improved carbon sequestration through improved planting.

Objective	Objective 2							
Measure	2.1 Increase opportunities for biodiversity, ecosystem services or urban greening to complement water management in Westminster.							
Actions	2.1.1 Clearly identify targets and opportunities for biodiversity enhancement in Westminster. 2.1.2 Produce a 'developer guide' on achieving multiple benefits within a development scheme.							
SEA8: Flood Risk	+	M	D	L	R	P	LT	Improving biodiversity is likely to result in positive effects upon flood risk resilience. Increased planting results in improved drainage within soils and increased absorption of waters. Therefore, it is anticipated that this will reduce surface standing water during rainfall and flood events, resulting in minor positive effects.
SEA9: Transport and Critical Infrastructure	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA10: Soils	+	M	I	L	R	P	LT	Minor positive indirect effects have been identified for soils as a result of this measure. Improving biodiversity will help to enhance the function of Westminster's soils, with both plants and species contributing to improved drainage and reduced soil erosion.
Potential Cumulative / Synergistic Effects	**SEA1:** Potential positive cumulative effects on health as a result of improved urban greening. **SEA3:** Potential positive cumulative effects from enhanced biodiversity within the Borough. **SEA4:** Potential positive cumulative effects from the development of high quality planting and habitats. **SEA5:** Potential positive cumulative effects upon the setting of heritage assets. **SEA7:** Potential positive cumulative effects on climate change from improved urban greening and climate resilience. **SEA6:** Potential positive cumulative effects on local water quality through reduced surface runoff. **SEA8:** Potential positive cumulative effects upon flood risk through improved flood risk resilience and improved drainage. **SEA10:** Potential positive cumulative effects on Westminster's soils through improved drainage and reduced erosion.							
Mitigation and Enhancement Measures	**SEA1:** New developments should present opportunities for new areas of green infrastructure and green space which can be accessed by the local community. **SEA3:** Biodiversity targets should exceed mandatory biodiversity net gain of 10% where possible. **SEA3:** Biodiversity measures that are implemented should aim to contribute to reducing flood risk where possible, with improved tree planting for drainage measures.							
Recommendations	The action of 2.1.2 could consider expanding to include the topics that will be included within the developer guide.							

Measure 2.2

Table C-7 - Assessment of Measure 2.2 and Actions

Objective	Objective 2							
Measure	2.2 Continue to Implement public realm SuDS with target to attenuate 15% of water above the surface for a 1:30yr event (3.33% AEP) from the SuDS Catchments by 2030.							
Actions	2.2.1 Engage with Westminster internal teams to develop the integration of SuDS into Westminster owned properties. 2.2.2 Develop standard details for different SuDS elements for easy integration into Westminster's public realm and highways schemes. 2.2.3 Provide design advice for ongoing public realm and highways schemes. 2.2.4 Develop SuDS masterplan for the SuDS Catchments, to identify potential areas within Westminster which would be suitable for SuDS and provide flood risk and wider benefits. 2.2.5 Retrofit SuDS within the identified SuDS Catchments. 2.2.6 Establish requirement for all major planning applications to submit a verification report detailing SuDS installed and storage volumes. 2.2.7 Develop and maintain a GIS database of all SuDS features and storage volumes across Westminster. 2.2.8 Develop targeted policy to encourage rainwater harvesting / reuse. 2.2.9 Develop innovative solutions to remove Surface Water Runoff from the Thames Water Combined Sewer System including assessing the opportunity to establish a separate surface water sewer in Westminster by 2050. 2.2.10 Develop a standardised maintenance and management plan (including estimated costs and maintenance schedules) for SuDS implemented in Westminster's public realm and highways.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
SEA1: Population & Human Health	++	H	D	L	I	P	LT	Significant positive effects are anticipated for population and human health as a result of SuDS contributing to reducing the effects of flooding in Westminster. There is potential for this measure and actions to result in improved flood resilience and reduced levels of distress caused by flooding. Additionally, if well designed, SuDS can add amenity to Westminster.
SEA2: Economy	+	M	I	L	I	P	LT	Indirect minor positive effects have been identified for economy as the implementation of SuDS can offer greater protection to flooding and therefore reduce economic damage during flood events.
SEA3: Biodiversity	+	M	D	L	I	P	LT	Minor positive effects have been identified as a result of this measure and associated actions. The implementation of SuDS can provide new habitats through additional blue infrastructure and vegetation.
SEA4: Landscape and Townscape	+	M	D	L	I	P	LT	There are anticipated to be minor positive effects as a result of these actions. Specifically, actions 2.2.2 and 2.2.3 are anticipated to contribute to the high quality design of SuDS and other development schemes that will positively enhance the local public realm.
SEA5: Historic Environment	+/-	M	D/I	L	I	P	LT	There is potential for the implementation of SuDS to provide greater protection to heritage assets within Westminster. Additionally, if well designed, SuDS can enhance the character and setting of heritage assets. However, there is potential for negative effects to arise as a result of the development required for SuDS, which may directly damage or impact heritage assets, including buried/undiscovered assets, or indirectly affect the setting of heritage assets, depending on the development that may arise as part of SuDS works.

Objective	Objective 2							
Measure	2.2 Continue to Implement public realm SuDS with target to attenuate 15% of water above the surface for a 1:30yr event (3.33% AEP) from the SuDS Catchments by 2030.							
Actions	2.2.1 Engage with Westminster internal teams to develop the integration of SuDS into Westminster owned properties. 2.2.2 Develop standard details for different SuDS elements for easy integration into Westminster's public realm and highways schemes. 2.2.3 Provide design advice for ongoing public realm and highways schemes. 2.2.4 Develop SuDS masterplan for the SuDS Catchments, to identify potential areas within Westminster which would be suitable for SuDS and provide flood risk and wider benefits. 2.2.5 Retrofit SuDS within the identified SuDS Catchments. 2.2.6 Establish requirement for all major planning applications to submit a verification report detailing SuDS installed and storage volumes. 2.2.7 Develop and maintain a GIS database of all SuDS features and storage volumes across Westminster. 2.2.8 Develop targeted policy to encourage rainwater harvesting / reuse. 2.2.9 Develop innovative solutions to remove Surface Water Runoff from the Thames Water Combined Sewer System including assessing the opportunity to establish a separate surface water sewer in Westminster by 2050. 2.2.10 Develop a standardised maintenance and management plan (including estimated costs and maintenance schedules) for SuDS implemented in Westminster's public realm and highways.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
SEA6: Water Environment	++	H	D	L	I	P	LT	This measure and actions are anticipated to result in significant positive effects for water environment. The implementation of SuDS is likely to result in controlled runoff of surface water during flood and heavy rainfall events. This is likely to positively affect water quality through controlled storage and release of water, reducing the quantity of pollutants washed into Westminster's water bodied during rainfall and flood events. Additionally, there is potential that that action 2.2.9 will lead to the separation of surface runoff and sewage water, which is likely to result in positive effects on water management within London and reduce the need for Thames Water to release raw sewage into the River Thames during heavy rainfall events, further improving water quality. Action 2.2.8 is also likely to improve water efficiency within the borough, harvesting and reusing rainwater is likely to contribute to reduced water usage from reservoirs, preserving water during drought events.
SEA7: Climate Change	++	H	D	L	I	P	LT	The implementation of SuDS within Westminster is anticipated to result in significant positive effects upon climate change. SuDS contribute to improving the climate resilience of the Borough, increasing the resilience to heavy rainfall events. Additionally, SuDS can contribute to reduction or sequestration of carbon. Action 2.2.8 is likely to improve water efficiency in the Borough, reducing the need to water from reservoirs. This is beneficial during drought events, which are likely to be exacerbated by climate change.
SEA8: Flood Risk	++	H	D	R	I	P	LT	Significant positive effects have been identified for flood risk as a result of the implementation of SuDS across Westminster, including new and retrofitting SuDS. These measures contribute to attenuating rainwater during rainfall events, storing the water for later release. This subsequently contributes to reduced surface water levels and reduces the likelihood of flooding as a result of heavy rainfall events.
SEA9: Transport and Critical Infrastructure	+	M	D	L	I	P	LT	There are anticipated to be minor positive effects as a result of these actions. Specifically, actions 2.2.2 and 2.2.3 are anticipated to contribute to the enhancement of highways schemes through the implementation of SuDS. This is likely to improve the

Objective	Objective 2							
Measure	2.2 Continue to Implement public realm SuDS with target to attenuate 15% of water above the surface for a 1:30yr event (3.33% AEP) from the SuDS Catchments by 2030.							
Actions	2.2.1 Engage with Westminster internal teams to develop the integration of SuDS into Westminster owned properties. 2.2.2 Develop standard details for different SuDS elements for easy integration into Westminster's public realm and highways schemes. 2.2.3 Provide design advice for ongoing public realm and highways schemes. 2.2.4 Develop SuDS masterplan for the SuDS Catchments, to identify potential areas within Westminster which would be suitable for SuDS and provide flood risk and wider benefits. 2.2.5 Retrofit SuDS within the identified SuDS Catchments. 2.2.6 Establish requirement for all major planning applications to submit a verification report detailing SuDS installed and storage volumes. 2.2.7 Develop and maintain a GIS database of all SuDS features and storage volumes across Westminster. 2.2.8 Develop targeted policy to encourage rainwater harvesting / reuse. 2.2.9 Develop innovative solutions to remove Surface Water Runoff from the Thames Water Combined Sewer System including assessing the opportunity to establish a separate surface water sewer in Westminster by 2050. 2.2.10 Develop a standardised maintenance and management plan (including estimated costs and maintenance schedules) for SuDS implemented in Westminster's public realm and highways.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
								resilience of the highways network within Westminster, reducing the severance of roads during flood events.
SEA10: Soils	+/-	M	D	L	I	P	LT	SuDS design has the potential to include vegetation and green infrastructure principles that may help to improve soil quality and improve ground infiltration. However, negative effects have been identified as there is potential for earthworks to be require as part of development.
Potential Cumulative / Synergistic Effects	**SEA1:** Potential positive cumulative effects arising from improved flood resilience, reducing the effects of flooding and distress. **SEA2:** Potential positive cumulative effects on economy through reduced damage during flood events. **SEA3:** Potential positive cumulative effects through the implementation of green and blue infrastructure. **SEA4:** Potential positive cumulative effects identified as a result of improved public realm design. **SEA5:** Potential positive cumulative effects from improved protection of heritage assets and improved settings. **SEA5:** Potential negative cumulative effects arising from potential damage to heritage assets and their settings during development. **SEA6:** Potential positive cumulative effects as a result of improved water quality, water efficiency, and reduced sewage release. **SEA7:** Potential positive cumulative effects as a result of implementing SuDS, contributing to climate resilience, and reduced reliance on reservoirs. **SEA8:** Potential positive cumulative effects from improved flood risk resilience arising from the implementation of SuDS. **SEA9:** Potential positive cumulative effects as a result of resilience of highways network to flooding. **SEA10:** Potential positive cumulative effects arising from improved vegetation and ground infiltration. **SEA10:** Potential negative cumulative effects arising from potential earthworks.							
Mitigation and Enhancement Measures	**SEA3:** Opportunity to work with natural processes to manage flood risk and enhance biodiversity and ecosystem resilience through habitat creation, green engineering and natural management techniques. **SEA3:** Scheme design should aim to minimise the environmental effects by 'designing to avoid' potential habitat features that may be of local, national and international importance. Habitat loss should be avoided, but where this can't be avoided, habitats will be reinstated upon completion of construction, and compensatory habitat should be considered to replace damaged or lost habitat.**SEA5:** Careful consideration should be given to the potential presence of heritage assets (particularly buried archaeology) when finalising developments. Where required, a programme of trial trenching and archaeological recording should be undertaken.							

Objective	Objective 2							
Measure	2.2 Continue to Implement public realm SuDS with target to attenuate 15% of water above the surface for a 1:30yr event (3.33% AEP) from the SuDS Catchments by 2030.							
Actions	2.2.1 Engage with Westminster internal teams to develop the integration of SuDS into Westminster owned properties. 2.2.2 Develop standard details for different SuDS elements for easy integration into Westminster's public realm and highways schemes. 2.2.3 Provide design advice for ongoing public realm and highways schemes. 2.2.4 Develop SuDS masterplan for the SuDS Catchments, to identify potential areas within Westminster which would be suitable for SuDS and provide flood risk and wider benefits. 2.2.5 Retrofit SuDS within the identified SuDS Catchments. 2.2.6 Establish requirement for all major planning applications to submit a verification report detailing SuDS installed and storage volumes. 2.2.7 Develop and maintain a GIS database of all SuDS features and storage volumes across Westminster. 2.2.8 Develop targeted policy to encourage rainwater harvesting / reuse. 2.2.9 Develop innovative solutions to remove Surface Water Runoff from the Thames Water Combined Sewer System including assessing the opportunity to establish a separate surface water sewer in Westminster by 2050. 2.2.10 Develop a standardised maintenance and management plan (including estimated costs and maintenance schedules) for SuDS implemented in Westminster's public realm and highways.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
	SEA5: SuDS design should adhere to guidance set out within the Mayor of London's (in partnership with the London Wildlife Trust) Urban Greening for Biodiversity Net Gain[1]. **SEA4/SEA5:** Measures should be well designed to incorporate natural features and positively contribute to landscape and heritage asset setting. Additionally, incorporation of the Construction Industry Research and Information Association's (CIRIA) guidance on SuDS design to ensure high-quality design that will minimise the effects on the historic environment and landscape. **SEA4/SEA5:** Developments should be well-designed and screened to ensure that their effects on the local townscape, landscape and historic setting are minimised. **SEA6:** Care should be taken during construction regarding the potential for contaminants such as silt, concrete or fuel oil to pollute water courses via surface run off. All construction activities should be undertaken in accordance with relevant best practice pollution prevention guidance. Pollution Incident Control Management Plans should be developed to limit adverse effects arising from pollution events. **SEA6:** Dependent on the nature of proposed flood risk schemes, natural hydromorphological functions could be impacted, resulting in negative effects. **SEA7:** Schemes should incorporate sustainable design measures to reduce overall levels of embodied carbon. The use of renewables for the energy supply during construction and operation will be investigated, as well as the use of materials with lower embodied carbon. **SEA10:** Site investigation works (for example, soil permeability tests) should be run to determine the suitability of soils for SuDS.							
Recommendations	No recommendations have been identified for these actions.							

[1] Mayor of London's (in partnership with the London Wildlife Trust) Urban Greening for Biodiversity Net Gain: A Design Guide. 2021 [online] https://www.london.gov.uk/sites/default/files/urban_greening_and_bng_design_guide_march_2021.pdf

Measure 2.3

Table C-8 - Assessment of Measure 2.3 and Actions

Objective	Objective 2							
Measure	2.3 Connect complimentary internal and London-wide strategies (including the London Surface Water Strategy) to ensure maximised flood risk and wider environmental benefits are realised.							
Actions	2.3.1 Engage with Westminster internal teams to highlight the wider benefits of SuDS and an integrated approach. 2.3.2 Review sources of funding with partners on a quarterly basis to identify opportunities for joint benefits. 2.3.3 Review internal and external strategies on a quarterly basis for opportunities to collaborate with other internal departments in Westminster and other RMAs. 2.3.4 Work with relevant partners and stakeholders to develop a joint Thames Riverside Strategy by 2030 in line with the Thames Estuary 2100 Plan.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
SEA1: Population & Human Health	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA2: Economy	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA3: Biodiversity	+	L	I	R	R	T	MT	Better alignment with the Surface Water Strategy (among others) will enable WCC to work collaboratively in partnership to deliver and coordinate integrated solutions for biodiversity. A main guiding principle of the Surface Water Strategy is to encourage promote natural solutions that manage surface water at source where practical, which could help to increase biodiversity in WCC..
SEA4: Landscape and Townscape	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA5: Historic Environment	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA6: Water Environment	+	M	I	R	R	P	LT	The joining up of strategies and the Thames Riverside Strategy is anticipated to result in improvements to water quality. Indirectly, it is anticipated that these actions may lead to interventions that will reduce surface runoff and reduce pollution within the River Thames and Westminster's water bodies. Better alignment with the Surface Water Strategy (among others) will enable WCC to work collaboratively in partnership to deliver and coordinate integrated solutions for water quality. A main aim of the Surface Water Strategy is to encourage consideration of the wider environmental issues and potential benefits.
SEA7: Climate Change	+	L	I	R	R	P	LT	Better collaboration and joined up thinking will ensure that the Borough will be more resilient to the effects of climate change, particularly as surface water flooding is one of London's main climate risks. The support of green infrastructure, SuDs and nature base solutions, may also have indirect benefits on cooling and carbon sequestration.
SEA8: Flood Risk	++	H	D	R	R	P	LT	Significant positive effects have been identified for flood risk as it is anticipated that the joined up approach to strategies will result in enhanced flood risk resilience measures across not only Westminster, but also the wider London area. These flood risk approaches are therefore anticipated to be consistent and result in benefits to flood defences.

Objective	Objective 2							
Measure	2.3 Connect complimentary internal and London-wide strategies (including the London Surface Water Strategy) to ensure maximised flood risk and wider environmental benefits are realised.							
Actions	2.3.1 Engage with Westminster internal teams to highlight the wider benefits of SuDS and an integrated approach. 2.3.2 Review sources of funding with partners on a quarterly basis to identify opportunities for joint benefits. 2.3.3 Review internal and external strategies on a quarterly basis for opportunities to collaborate with other internal departments in Westminster and other RMAs. 2.3.4 Work with relevant partners and stakeholders to develop a joint Thames Riverside Strategy by 2030 in line with the Thames Estuary 2100 Plan.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
								Additionally, the review of finding is likely to result in improvements to the continued implementation of flood defences within developments, ensuring continued progression across the lifecycle of the LFRMS.
SEA9: Transport and Critical Infrastructure	++	H	D	R	I	P	LT	The joining of the LFRMS with internal and London-wide strategies is likely to result in a more joined up approach and greater capacity to flood risk management, ensuring that WCC works together to reduce flood risk across the Borough, and neighbouring areas. This is likely to offer greater protection of the Borough's critical infrastructure.
SEA10: Soils	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Potential Cumulative / Synergistic Effects	**SEA3:** Potential positive cumulative effects as a result of integrated solutions offering potential for biodiversity. **SEA6:** Potential positive cumulative effects on water quality through reduced pollution of the River Thames. **SEA7:** Potential positive cumulative effects on climate change through improved climate resilience measures. **SEA8:** Potential positive cumulative effects through improved flood defences and flood risk resilience measures. **SEA9:** Potential positive cumulative effects on the protection of transport and critical infrastructure.							
Mitigation and Enhancement Measures	No mitigation or enhancement measures have been identified.							
Recommendations	Both actions 2.3.3. and 2.3.4 could consider expanding their actions to state key areas that will be included within strategies, for example, flood defences, or improving water quality.							

Measure 3.1

Table C-9 - Assessment of Measure 3.1 and Actions

Objective	Objective 3							
Measure	3.1 Implement a system of identifying, contacting and providing support to residents before, during and after flood events by 2026.							
Actions	3.1.1 Identify residents that are at risk of surface water flooding and provide them with detailed information for support during a flood event. 3.1.2 Update the WCC website to include a dashboard of all extreme weather events, flood risk and a virtual warning system. 3.1.3 Utilise social media to issue flood alerts and warnings during flood events. 3.1.4 Develop text warning system that can be signed up to for severe weather. 3.1.5 Provide support to most affected communities after a flood event through personal contact and online information.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
SEA1: Population & Human Health	++	M	D	L	I	P	MT/LT	This measure and actions are likely to result in minor positive effects upon population and human health. Implementing support and contacting residents and after flood events supports community engagement, and helps to inform the local community, building resilience. Additionally, providing a warning system for flood events may result in reduced numbers of people being affected by flooding, allowing for evacuation time. This results in reduced levels of distress during flood events and is particularly likely to benefit those who are in more vulnerable households.
SEA2: Economy	+	M	D	L	R	T	MT	Contacting residents with support during, before and after flood events is likely to benefit the local businesses owners who may have been affected by flooding. There is potential that this support for early warnings for flood events may carry into businesses and benefit the resilience of local businesses.
SEA3: Biodiversity	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA4: Landscape and Townscape	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA5: Historic Environment	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA6: Water Environment	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA7: Climate Change	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA8: Flood Risk	+	L	D	L	I	P	LT	Developing a system of identification, contacting and support for residents before and after flooding is likely to reduce the vulnerability of residents within Westminster to flooding, reducing flood risk for communities. Minor positive effects have therefore been identified.

Objective	Objective 3							
Measure	3.1 Implement a system of identifying, contacting and providing support to residents before, during and after flood events by 2026.							
Actions	3.1.1 Identify residents that are at risk of surface water flooding and provide them with detailed information for support during a flood event. 3.1.2 Update the WCC website to include a dashboard of all extreme weather events, flood risk and a virtual warning system. 3.1.3 Utilise social media to issue flood alerts and warnings during flood events. 3.1.4 Develop text warning system that can be signed up to for severe weather. 3.1.5 Provide support to most affected communities after a flood event through personal contact and online information.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
SEA9: Transport and Critical Infrastructure	+	M	D	L	R	P	MT	The development of a flood warning system is anticipated to result in minor positive effects upon transport networks. This system will help providers to tailor services during flood events, enabling a reduced/essential service. Subsequently, this will also help to maintain connectivity for users during flooding.
SEA10: Soils	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Potential Cumulative / Synergistic Effects	**SEA1:** Potential positive cumulative effects for population and human health as a result of improved engagement, reduced distress and reduced inequalities. **SEA2:** Potential positive cumulative effects to economy through improved resilience. **SEA8:** Potential positive cumulative effects, reducing the effects of flooding within Westminster.							
Mitigation and Enhancement Measures	**SEA1:** Support provided to residents should be tailored for specific household types and needs, minimising any inequalities as a result of flood events. Consideration should also be given to those who may not have access to a smart phone or the internet, for instance use of landlines. **SEA2:** Local small business owners should have tailored support during flood events to enable quick re-opening of small businesses that have been affected by floods, ensuring local economies are resilient and businesses of all sizes are supported.							
Recommendations	Action 3.1.3 could consider expanding to include both social media and phone/text alerts for flood events. It could also extend warnings to transport network providers,							

Measure 3.2

Table C-10 - Assessment of Measure 3.2 and Actions

Objective	Objective 3							
Measure	3.2 Improve resilience and recovery amongst partners, businesses and communities.							
Actions	3.2.1 Provide information on WCC website for improving property resilience and preparing for flooding. 3.2.2 Provide information on WCC website for recovery after a flood event. 3.2.3 Work with Thames Water to understand how they would prefer flood events to be reported and communicate this to businesses and communities. 3.2.4 Carry out Section 19 investigations within 4 weeks following a flood event that triggers the S19 threshold.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
SEA1: Population & Human Health	+/-	M	D/I	L	R/I	P	MT/LT	This measure and actions will contribute to improved community resilience to flooding, particularly in the Borough's homes. However, potential resilience measures within action 3.2.1 are likely to have to be implemented by private home owners. Therefore, some communities may be unable to afford to implement resilience measures. This may increase the inequalities within the Borough with relation to flood risk vulnerability, contributing to mixed positive and negative effects. Additionally, the Section 19 investigations and reporting could identify measures to aid in preventing future flood damage. Indirectly, this may be used within homes and developments to build future resilience and aid in ensuring that developments are suitable for current and future generations.
SEA2: Economy	+	M	D	L	R/I	P	MT/LT	This measure and actions are anticipated to result in improvements to local resilience, providing information of flood risk. This will also be accessible by businesses. Improving flood risk resilience from businesses is likely to result in reduced economic damage as a result of flood events. Additionally, this may help to support protection of businesses within the Borough. Minor positive effects have therefore been identified.
SEA3: Biodiversity	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA4: Landscape and Townscape	+/-	M	D	L	R	P	LT	The Royal Parks are included as a key Partner to WCC. Therefore, improving resilience from this partner has potential to result in improvements to the landscape of the local parks, as flood risk resilience within the Royal Parks may be improved subsequently improving the landscape of the parks and minimising flood damage. However, there is potential for negative effects upon landscape and townscape settings if the implementation of flood resilience measures are not sensitively designed.
SEA5: Historic Environment	+/-	M	D	L	R	P	LT	There is potential for positive effects on historic environment from improving flood resilience measures. However, there is potential for negative effects

Objective	Objective 3							
Measure	3.2 Improve resilience and recovery amongst partners, businesses and communities.							
Actions	3.2.1 Provide information on WCC website for improving property resilience and preparing for flooding. 3.2.2 Provide information on WCC website for recovery after a flood event. 3.2.3 Work with Thames Water to understand how they would prefer flood events to be reported and communicate this to businesses and communities. 3.2.4 Carry out Section 19 investigations within 4 weeks following a flood event that triggers the S19 threshold.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
								upon landscape and townscape settings if the implementation of flood resilience measures are not sensitively designed.
SEA6: Water Environment	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA7: Climate Change	+	M	D	L	I	P	MT/LT	This measure and actions are anticipated to result in improved implementation of resilience measures, including measures that will help mitigate against future heavy rainfall, exacerbated by climate change. Additionally, Section 19 investigations and reporting have the potential to identify measures to aid in preventing future flood damage and implement further resilience measures to climate exacerbated flooding.
SEA8: Flood Risk	+	M	D	L	I	P	MT/LT	Improving flood resilience across businesses and communities is likely to result in reduced risk of flooding across the Borough. Additionally, Section 19 investigations and reports may identify additional flood defences that are required, further reducing future flood risk in Westminster.
SEA9: Transport and Critical Infrastructure	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA10: Soils	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Potential Cumulative / Synergistic Effects	**SEA1:** Potential positive cumulative effects upon population and human health through improved resilience and reduced flood risk damage. **SEA1:** Potential negative cumulative effects arising from increased flooding inequalities. **SEA2:** Potential positive cumulative effects on businesses through improved resilience, and likely reduced economic damage. **SEA4:** Potential positive cumulative effects on landscape from improved resilience in parks and open spaces. **SEA4:** Potential negative cumulative effects arising from insensitive design of resilience measures. **SEA7:** Potential positive cumulative effects on climate resilience measures across the Borough. **SEA8:** Potential positive cumulative effects on flood risk as a result of improved resilience measures both currently and in the future.							
Mitigation and Enhancement Measures	**SEA1/SEA2:** Resilience information should be developed individually to support different types of partners, businesses, and community needs. **SEA4/SEA5:** Resilience information should include resilience measures that are sensitively designed, as to minimise negative effects on the townscape and historic environment setting.							

Objective	Objective 3							
Measure	3.2 Improve resilience and recovery amongst partners, businesses and communities.							
Actions	3.2.1 Provide information on WCC website for improving property resilience and preparing for flooding. 3.2.2 Provide information on WCC website for recovery after a flood event. 3.2.3 Work with Thames Water to understand how they would prefer flood events to be reported and communicate this to businesses and communities. 3.2.4 Carry out Section 19 investigations within 4 weeks following a flood event that triggers the S19 threshold.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
Recommendations	Action 3.2.1 should consider expanding to include additional sources of funding that are available for less affluent communities who may not be able to afford implementing resilience measures without financial aid.							

Objective 4

Measure 4.1

Table C-11 - Assessment of Measure 4.1 and Actions

Objective	Objective 4							
Measure	4.1 Streamline local planning guidance and clarify necessary documentation for all developments by 2025.							
Actions	4.1.2 Update the WCC website regularly with the relevant planning guidance and documents. This includes developer checklists, updating and keeping the SFRA under review. 4.1.3 Keep a database of new incoming planning applications for basement developments to provide an indication of where there is a lot of basement development coming forward. 4.1.4 Ensure the GLA GIS database of basements is up to date.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
SEA1: Population & Human Health	+	L	I	L	R/I	P	ST/LT	Minor positive indirect effects have been identified for this measure and actions as there is potential that improved guidance availability, continued development of the SFRA, and awareness of basement developments may lead to improved development quality, ensuring developments are fit for future generations.
SEA2: Economy	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA3: Biodiversity	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA4: Landscape and Townscape	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA5: Historic Environment	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA6: Water Environment	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA7: Climate Change	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA8: Flood Risk	+	L	I	L	R/I	P	ST/LT	Minor positive indirect effects have been identified for this measure and actions as there is potential that improved guidance availability, continued development of the SFRA, and awareness of basement developments may lead to improved implementation of flood resilience measures within developments, reducing flood risk.
SEA9: Transport and Critical Infrastructure	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Objective	Objective 4							
Measure	4.1 Streamline local planning guidance and clarify necessary documentation for all developments by 2025.							
Actions	4.1.2 Update the WCC website regularly with the relevant planning guidance and documents. This includes developer checklists, updating and keeping the SFRA under review. 4.1.3 Keep a database of new incoming planning applications for basement developments to provide an indication of where there is a lot of basement development coming forward. 4.1.4 Ensure the GLA GIS database of basements is up to date.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
SEA10: Soils	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Potential Cumulative / Synergistic Effects	**SEA1:** Potential positive cumulative effects on population and human health as development is likely to support future population needs. **SEA8:** Potential positive cumulative effects from reduced flood risk.							
Mitigation and Enhancement Measures	None identified.							
Recommendations	No recommendations have been identified for these actions.							

Measure 4.2

Table C-12 - Assessment of Measure 4.2 and Actions

Objective	Objective 4							
Measure	4.2 Ensure all new developments consider SuDS, with preference to above ground SuDS by 2025.							
Actions	4.2.1 Update planning guidance for developers to ensure that flood risk and SuDS are considered in all new developments, with preference for above ground SuDS.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
SEA1: Population & Human Health	++	H	D	L	R	P	LT	Significant positive effects are anticipated for population and human health as a result of including SuDS within development, improving the resilience of developments. This is particularly likely to benefit population and human health if SuDS are included within housing developments, reducing the levels of distress caused by flooding. Additionally, if well designed, SuDS can add amenity to Westminster.
SEA2: Economy	+	M	D	L	I	P	LT	Minor positive effects have been identified for economy as the implementation of SuDS in new developments, including business developments, can offer greater protection to flooding and therefore reduce economic damage during flood events.
SEA3: Biodiversity	+/-	M	D	L	I	P/T	ST/LT	Positive effects have been identified as a result of this measure and associated action. The implementation of SuDS can provide new habitats through additional blue infrastructure and vegetation. However, the construction associated with above ground SuDS can result in disturbance to local biodiversity through the potential for noise, earthworks, and temporary habitat disruption.
SEA4: Landscape and Townscape	+/-	M	D	L	I	P	LT	There are anticipated to be minor positive effects as a result of this measure and action. Above ground SuDS are less discrete and have potential to alter the local townscape. However, if well designed, the development of high quality design of SuDS has the potential to positively enhance the local public realm.
SEA5: Historic Environment	+/-	M	D/I	L	I	P	LT	There is potential for the implementation of SuDS to provide greater protection to heritage assets within Westminster. Above ground SuDS are less discrete and have potential to alter the setting of local heritage assets. However, if well designed, SuDS can enhance the character and setting of heritage assets. The development of above ground SuDS also offers increased protection to buried/undiscovered assets.
SEA6: Water Environment	++	H	D	L	I	P	LT	This measure and action is anticipated to result in significant positive effects for water environment. The implementation of SuDS is likely to result in controlled runoff of surface water during flood and heavy rainfall events. This is likely to positively affect water quality through controlled storage and release of water, reducing the quantity of pollutants washed into Westminster's water bodied during rainfall and flood events. Additionally, there is potential that this may positively affect water management within London and contribute to reduced need for Thames Water to release raw sewage into the River Thames during heavy rainfall.

Objective	Objective 4							
Measure	4.2 Ensure all new developments consider SuDS, with preference to above ground SuDS by 2025.							
Actions	4.2.1 Update planning guidance for developers to ensure that flood risk and SuDS are considered in all new developments, with preference for above ground SuDS.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
SEA7: Climate Change	++	H	D	L	I	P	LT	The implementation of SuDS within new developments is anticipated to result in significant positive effects upon climate change. SuDS contribute to improving the climate resilience of the Borough, increasing the resilience to heavy rainfall events. Additionally, SuDS can contribute to reduction or sequestration of carbon.
SEA8: Flood Risk	++	H	D	L	I	P	LT	The implementation of SuDS within Westminster is anticipated to result in significant positive effects upon flood risk. SuDS contribute to managing water storage and drainage during heavy rainfall, reducing surface water and therefore reducing flood risk. This contributes to reducing the risk of flooding in areas where SuDS are present.
SEA9: Transport and Critical Infrastructure	+	M	D	L	R	P	LT	There is potential for this measure and action to result in improvements to the resilience of critical infrastructure and the transport network within the Borough, particularly if transport developments are to arise.
SEA10: Soils	+/-	M	D	L	I	P	LT	SuDS design has the potential to include vegetation and green infrastructure principles that may help to improve soil quality and improve ground infiltration. However, negative effects have been identified as there is potential for earthworks to be require as part of development.
Potential Cumulative / Synergistic Effects	**SEA1:** Potential positive cumulative effects as a result of reducing distress caused by flooding. **SEA2:** Potential positive cumulative effects on economy through reduced damage during flood events. **SEA3:** Potential positive cumulative effects through the implementation of green and blue infrastructure. **SEA3:** Potential negative cumulative effects from disruption to biodiversity during construction. **SEA4:** Potential positive cumulative effects identified as a result of improved public realm design. **SEA5:** Potential positive cumulative effects from improved protection of heritage assets and improved settings. **SEA6:** Potential positive cumulative effects upon water quality through reduced surface runoff and pollutants. **SEA6:** Potential positive cumulative effects as a result of improved water quality, water efficiency, and reduced sewage release. **SEA7:** Potential positive cumulative effects upon climate change through improved resilience to increased rainfall, and reduction in carbon. **SEA8:** Potential positive cumulative effects upon flood risk through improved drainage and flood risk mitigation methods. **SEA9:** Potential positive cumulative effects upon critical infrastructure through improved drainage and use of sustainable materials. **SEA10:** Potential positive cumulative effects arising from improved vegetation and ground infiltration. **SEA10:** Potential negative cumulative effects arising from potential earthworks.							
Mitigation and Enhancement Measures	**SEA3:** Opportunity to work with natural processes to manage flood risk and enhance biodiversity and ecosystem resilience through habitat creation, green engineering and natural management techniques. **SEA3:** Scheme design should aim to minimise the environmental effects by ‘designing to avoid’ potential habitat features that may be of local, national and international importance. Habitat loss should be avoided, but where this can’t be avoided, habitats will be reinstated upon completion of construction, and compensatory habitat should be considered to replace damaged or lost habitat. Where possible, appropriate planting of native species should be included to enhance biodiversity on sites. **SEA5:** Careful consideration should be given to the potential presence of heritage assets (particularly buried archaeology) when finalising developments. Where required, a programme of trial trenching and archaeological recording should be undertaken.							

Objective	Objective 4							
Measure	4.2 Ensure all new developments consider SuDS, with preference to above ground SuDS by 2025.							
Actions	4.2.1 Update planning guidance for developers to ensure that flood risk and SuDS are considered in all new developments, with preference for above ground SuDS.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
	SEA5: SuDS design should adhere to guidance set out within the Mayor of London's (in partnership with the London Wildlife Trust) Urban Greening for Biodiversity Net Gain[2]. **SEA4/SEA5:** Measures should be well designed to incorporate natural features and positively contribute to landscape and heritage asset setting. Measures should incorporate CIRIA guidance on SuDS design to ensure high-quality design that will minimise the effects on the historic environment and landscape. **SEA4/SEA5:** Developments should be well-designed and screened to ensure that their effects on the local townscape, landscape and historic setting are minimised. **SEA6:** Care should be taken during construction regarding the potential for contaminants such as silt, concrete or fuel oil to pollute water courses via surface run off. All construction activities should be undertaken in accordance with relevant best practice pollution prevention guidance. Pollution Incident Control Management Plans should be developed to limit adverse effects arising from pollution events. **SEA6:** Dependent on the nature of proposed flood risk schemes, natural hydromorphological functions could be impacted, resulting in negative effects. **SEA7:** Schemes should incorporate sustainable design measures to reduce overall levels of embodied carbon. The use of renewables for the energy supply during construction and operation will be investigated, as well as the use of materials with lower embodied carbon. **SEA10:** Site investigation works (for example, soil permeability tests) should be run to determine the suitability of soils for SuDS.							
Recommendations	No recommendations have been identified for this measure.							

[2] Mayor of London's (in partnership with the London Wildlife Trust) Urban Greening for Biodiversity Net Gain: A Design Guide. 2021 [online] https://www.london.gov.uk/sites/default/files/urban_greening_and_bng_design_guide_march_2021.pdf

Objective 5

Measure 5.1

Table C-13 - Assessment of Measure 5.1 and Actions

Objective	Objective 5							
Measure	5.1 Engage in regional networks for sharing of knowledge and best practice.							
Actions	5.1.1 Regular attendance (quarterly) at the Central London North Flood Risk Partnership Group and LoDEG. 5.1.2 Disseminate regional updates internally on a regular basis through LLFA meetings and email.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
SEA1: Population & Human Health	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA2: Economy	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA3: Biodiversity	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA4: Landscape and Townscape	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA5: Historic Environment	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA6: Water Environment	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA7: Climate Change	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA8: Flood Risk	+	L	I	R	R	P	MT	Minor positive effects have been identified from this measure and actions as it is anticipated that knowledge sharing at the Central London North Flood Risk Partnership and LoDEG and subsequent sharing from LLFA meetings will include additional flood risk resilience measures that can be applied within Westminster. This is likely to contribute to reduced flood risk within the Borough.
SEA9: Transport and Critical Infrastructure	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA10: Soils	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Objective	Objective 5							
Measure	5.1 Engage in regional networks for sharing of knowledge and best practice.							
Actions	5.1.1 Regular attendance (quarterly) at the Central London North Flood Risk Partnership Group and LoDEG. 5.1.2 Disseminate regional updates internally on a regular basis through LLFA meetings and email.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
Potential Cumulative / Synergistic Effects	**SEA8:** Potential positive cumulative effects upon flood risk resilience.							
Mitigation and Enhancement Measures	**SEA1/SEA7/SEA9:** Best practice measures that are identified that can be passed on to other community groups should be communicated, with support in place for the implementation of these measures.							
Recommendations	Action 5.1.2 could consider expanding to state which organisations information will be shared with.							

Measure 5.2

Table C-14 - Assessment of Measure 5.2 and Actions

Objective	Objective 5							
Measure	5.2 Work with other RMAs and risk management stakeholders to engage communities.							
Actions	5.2.1 Ensure pertinent information from local neighbourhood forums is disseminated to Westminster stakeholders. 5.2.2 WCC will Jointly attend at least two public events in local communities per year with other RMAs.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
SEA1: Population & Human Health	+	M	D	L	R	P	MT	Minor positive effects have been identified for population and human health. This measure and actions support community engagement initiatives, encouraging communication with RMAs and stakeholders of the LFRMS. This is also likely to result in a more informed community, in turn reducing the levels of distress upon the community during flood events.
SEA2: Economy	+	M	D	L	R	P	MT	Minor positive effects have been identified for economy as businesses are likely to benefit from improved neighbourhood forums and stakeholder engagement, resulting in improved resilience to flooding and therefore reduced damage as a result of flooding.
SEA3: Biodiversity	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA4: Landscape and Townscape	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA5: Historic Environment	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA6: Water Environment	+	L	I	L	R	P	MT	Given that both Thames Water and the Environment Agency are RMAs, there is potential that that improved communication will result in increased awareness of both flooding and water pollution and community engagement may indirectly benefit water quality, reducing pollutants from communities that are carried into water bodies.
SEA7: Climate Change	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA8: Flood Risk	+	M	D	L	R	P	LT	Minor positive effects are anticipated for flood risk as a result of these actions. Additional engagement with communities has potential to contribute to improved flood risk resilience within the Borough through two way communication, highlighting areas for improvement of physical measures as well as improving knowledge of flooding, reducing the effects of flood risk.
SEA9: Transport and Critical Infrastructure	+	L	I	L	R	P	MT	Both TfL and WCC are RMAs which means that there is potential that engaging with communities will result in increased awareness of the effects of flooding on transport infrastructure and lead to reduced customer disruption during flood events.

Objective	Objective 5							
Measure	5.2 Work with other RMAs and risk management stakeholders to engage communities.							
Actions	5.2.1 Ensure pertinent information from local neighbourhood forums is disseminated to Westminster stakeholders. 5.2.2 WCC will Jointly attend at least two public events in local communities per year with other RMAs.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
SEA10: Soils	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Potential Cumulative / Synergistic Effects	**SEA1:** Potential positive cumulative effects from improved community engagement initiatives. **SEA2:** Potential positive cumulative effects from improved resilience and reduced economic damage. **SEA6:** Potential positive cumulative effects upon water quality. **SEA8:** Potential positive cumulative effects on flood risk resilience. **SEA9:** Potential positive cumulative effects on transport from reduced disturbance during flood events.							
Mitigation and Enhancement Measures	No mitigation or enhancement measures have been identified for these actions.							
Recommendations	No recommendations have been identified for these actions.							

Measure 5.3

Table C-15 - Assessment of Measure 5.3 and Actions

Objective	Objective 5							
Measure	5.3 Encourage the involvement of communities and businesses in Flood Risk Management.							
Actions	5.3.1 Identify opportunities for joint funded community resilience projects. Review on a quarterly basis. 5.3.2 Engage with community groups about upcoming FRM schemes and their areas of concern through attendance of their meetings and specific engagement events. 5.3.3. Support and promote the establishment of community flood wardens in the most at risk areas. 5.3.3 Establish an online system for reporting flood incidents in Westminster.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
SEA1: Population & Human Health	++	H	D	L	I	P	LT	Significant positive effects have been identified for population and human health as this measure and actions encourage community engagement measures. Additionally, community resilience projects have the potential to result in measures that support population growth. Reporting flood incidents is also anticipated to result in improved future flood defences, that will meet future population growth. Engagement of flood risk management also has potential to benefit communities through reducing the effects of flooding and reducing inequalities, with communities able to communicate their needs.
SEA2: Economy	++	H	D	L	I	P	LT	Significant positive effects have been identified for economy as this measure and actions will engage businesses and result in community resilience to flooding, protecting businesses and reducing economic damage during flood events.
SEA3: Biodiversity	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA4: Landscape and Townscape	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA5: Historic Environment	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA6: Water Environment	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA7: Climate Change	+	M	I	L	I	P	ST/LT	Mixed positive and negative effects have been identified for climate change. Positive effects are anticipated as a result of the potential for community resilience projects to result in positive effects on climate resilience to increased rainfall and flood events.
SEA8: Flood Risk	++	H	D	L	I	P	LT	Significant positive effects are anticipated for flood risk as a result of this measure and actions. Additional flood risk engagement from communities and businesses is likely to result in improved flood risk resilience measures that suit Westminster's communities. This is likely to contribute to reducing flood risk. Additionally, the joint funding of projects is likely to result in improved

Objective	Objective 5							
Measure	5.3 Encourage the involvement of communities and businesses in Flood Risk Management.							
Actions	5.3.1 Identify opportunities for joint funded community resilience projects. Review on a quarterly basis. 5.3.2 Engage with community groups about upcoming FRM schemes and their areas of concern through attendance of their meetings and specific engagement events. 5.3.3. Support and promote the establishment of community flood wardens in the most at risk areas. 5.3.3 Establish an online system for reporting flood incidents in Westminster.							
SEA Objective	**Significance**	**Magnitude**	**Nature of effect**	**Spatial Extent**	**Reversibility**	**Permanence**	**Duration**	**Description of potential Effects**
								implementation. An online reporting system for flood incidents will also contribute to informing WCC and identifying areas of future flood defence need, aiding in reducing future risks.
SEA9: Transport and Critical Infrastructure	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEA10: Soils	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Potential Cumulative / Synergistic Effects	**SEA1:** Potential positive cumulative effects arising from improved community engagement and flood risk management that suits local needs. **SEA2:** Potential positive cumulative effects from improved flood risk resilience for businesses. **SEA7:** Potential positive cumulative effects arising from resilience measures to increased rainfall and exacerbated flood events. **SEA8:** Potential positive cumulative effects arising from improved flood risk resilience measures that suit the needs of the Borough.							
Mitigation and Enhancement Measures	**SEA1:** Flood Wardens should be advertised to inform the public. This advertising should also include contacting those without access to the internet. **SEA7:** Where possible, community resilience measures arising from these actions should aim to minimise levels of embodied carbon.							
Recommendations	No recommendations have been identified for this measure.							

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