

Strategic Environmental Assessment Screening Report

Prepared for

Royal Borough of Greenwich

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Executive Summary

The Royal Borough of Greenwich (RBG) Council as the Lead Local Flood Authority (LLFA), is responsible for developing, maintaining, applying and monitoring a Local Flood Risk Management Strategy (LFRMS) for the Borough. In line with statutory requirements, a Strategic Environmental Assessment (SEA) must be undertaken when a new strategy is proposed, to ensure that it does not result in any adverse environmental impact.

The SEA process is comprised of five stages. This document represents Stage A, the SEA Screening Report. The purpose of this screening is to assess whether the implementation of the LFRMS and its associated Action Plan is likely to have significant environmental effects, thus determining whether a full SEA is required.

This Screening Assessment evaluated the potential impact of each strategic objective of the LFRMS against a set of SEA objectives, developed to reflect key environmental priorities within RBG. The SEA objectives are as follows:

• **SEA 1**: Ensure all of RBG's critical infrastructure has sufficient protection from flooding.

• **SEA 2**: Ensure RBG's increasing population is adequately housed, with flood risk prioritised within developments.

• **SEA 3**: Ensure vulnerable residents and residents in deprived areas have access to the services and resources needed before, during, and after a flooding event.

• **SEA 4**: Promote air and water quality improvement through flood risk interventions.

• **SEA 5**: Promote sustainable development to reduce and mitigate the potential impacts of climate change, therefore improving resilience to flooding events and improving biodiversity and amenity.

• **SEA 6**: Safeguard cultural and heritage assets and ensure they are made resilient to flooding, without affecting the integrity of the asset.

• **SEA 7**: Improve the status of all WFD waterbodies within the borough, where possible.

These SEA objectives were informed by a review of current environmental challenges and opportunities within RBG, based on a comprehensive analysis of baseline data. This included:

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

This assessment concluded that the implementation of the LFRMS is unlikely to have any negative effects on the environment. The implementation of the LFRMS is expected to generate positive outcomes across the SEA objectives, with some neutral impacts identified.

Therefore, this Screening Report demonstrates that the LFRMS has appropriately considered the environmental results of implementing its actions within RBG. As a result, it is not required to progress the LFRMS to the second stage of the SEA process.

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Acronyms and Abbreviations

Table 1.1: Acronyms and abbreviations

Abbreviation	Definition
AQS	Air Quality Strategy
BNG	Biodiversity Net Gain
EA	Environment Agency
FWMA	Flood and Water Management Act (2010)
HRA	Habitats Regulation Assessment
LFRMS	Local Flood Risk Management Strategy
LLFA	Lead Local Flood Authority
NO_2	Nitrogen Dioxide
ONS	Office for National Statistics
PM	Particulate Matter
RMA	Risk Management Authority
SEA	Strategic Environmental Assessment
SINC	Site of Importance for Nature Conservation
SuDS	Sustainable Drainage Systems
WFD	Water Framework Directive (2000)

1 Introduction

1.1 Purpose of Screening

The purpose of a Strategic Environmental Assessment (SEA) is to ensure a high level of environmental protection by evaluating the potential environmental impacts of a proposed plan or programme at an early stage of development. This process supports the goal of promoting sustainable development. The European SEA Directive (2001) was adopted by UK law in 2004 and is implemented through the Environmental Assessment of Plans and Programmes Regulations 2004. Under these regulations, an SEA report must be prepared and made publicly available, outlining and assessing the likely significant environmental impacts of implementing a plan or programme.

The purpose of this SEA Screening Report is to clearly identify and understand the potential environmental impacts arising from the objectives and associated actions outlined in the Local Flood Risk Management Strategy (LFRMS) and its associated Action Plan. Through this screening process, an informed decision on whether the LFRMS requires a full SEA can be determined.

1.2 Methodology

There are five stages to a SEA, each with specific objectives and tasks. These are summarised in Table 1.1. This document is the main outcome from Stage A. Progression onto the following stages is only required if potential significant environmental impacts are identified at this Screening Stage.

Table 1.1: SEA Stages and Tasks Description

SEA Stages		SEA Tasks
Screening Stage	Stage A: Setting the context and objectives, establishing the baseline, and deciding on the scope.	A1: Identifying other relevant policies, plans and programmes and environmental protection objectives.
		A2: Collecting baseline information.
		A3: Identifying environmental issues and problems.
		A4: Developing the SEA objectives and framework.
		A5: Consulting on the scope of the SEA.
Full Assessment Stage	Stage B: Developing and refining options and assessing effects.	B1: Testing the plan objectives against SEA objectives.
		B2: Developing strategic alternatives.
		B3: Predicting the effects of the plan, including alternatives.
		B4: Evaluating the effects of the plan, including alternatives.
		B5: Mitigating adverse effects.

SEA Stages		SEA Tasks
		B6: Proposing measures to monitor the environmental effects of implementing the plan.
	Stage C:	C1: Preparing the environmental report.
	Stage D: Consulting on the draft strategy and the SEA report.	D1: Consulting on the draft strategy and environmental report with the public and consultation bodies.
		D2: Assessing significant changes.
		D3: Making decisions and providing information.
	Stage E: Monitoring the significant effects of implementing the strategy.	E1: Developing aims and methods for monitoring.
		E2: Responding to adverse effects

1.3 SEA Consultation Questions

The SEA Screening Report requires review by statutory consultees. To fulfil this, a set of consultation questions have been developed for each task of this SEA. Statutory consultation bodies will be asked to respond to these consultation questions prior to the public consultation phase of this document. A full list of the consultation questions has been included below for completeness.

Task A1: Legislation, plan and policies

1. Do you feel we have included all relevant policies, documents, plans and legislation that relate to or could affect the Local Flood Risk Management Strategy?

2. If not, which policies do you think have been overlooked?

Task A2: Baseline data

3. Do you agree that the baseline data we have included herein is appropriate to the Local Flood Risk Management Strategy that is being developed?

4. Do you have, or know of, any additional baseline indicators or data that should be added into this SEA screening assessment?

5. As far as you are aware, is the baseline data correct?

Task A3: Environmental issues affecting the borough

6. Do you agree that these are the main environmental issues relating to the strategy affecting RBG?

7. Are there any other environmental issues that you believe should be added into this SEA? If so, please give details.

8. Do you believe that any of these environmental issues do not affect Greenwich? If so, please give details.

Task A4: Proposed SEA objectives

9. Do you agree that these proposed SEA objectives are suitable in the context of Greenwich?

10. Are there any other SEA objectives that you believe should be included? If so, please give details.

Task A5: SEA methodology

11. Do you have any comments on the proposed method for the assessment of the SEA objectives against the Local Flood Risk Management Strategy objectives and actions?

12. Do you agree with the screening analysis of each of the Local Flood Risk Management Strategy strategic objectives? If not, please give reasons as to why you would screen a certain objective differently.

Conclusion and further comments

13. Do you have any comments on the conclusions that we have made in this SEA screening report of the Local Flood Risk Management Strategy?

14. Do you have any additional comments or suggestions for this SEA screening report?

1.4 Local Flood Risk Management Strategy (LFRMS)

The Royal Borough of Greenwich has the role of Lead Local Flood Authority (LLFA) under the Flood and Water Management Act (2010) (FWMA). The role of LLFA entails the statutory responsibility to develop, maintain, and apply a LFRMS. This sets out the borough's aims and objectives in managing local flood risk.

1.4.1 Local Area Information

RBG is located in south-east London and shares boundaries with several neighbouring boroughs, including Newham, Tower Hamlets, and Barking and Dagenham to the north, across the River Thames. Bexley to the east, Bromley to the south, and Lewisham to the south and west. The River Thames forms the borough's northern boundary and plays a significant role in shaping its flood risk and drainage characteristics.

RBG is traversed by several watercourses and culverted streams that flow into the Thames, notably, the River Quaggy, which flows through the Kidbrooke area before discharging into the Thames. The borough’s varied topography, urban development, and underlying geology contribute to areas of surface water flood risk, which are managed by the Lead Local Flood Authority (LLFA). In addition, RBG collaborates with neighbouring boroughs and other risk management authorities to effectively manage and reduce flood risk across administrative boundaries.

1.4.2 LFRMS Strategic Objectives

The five objectives of the LFRMS are:

A. Improve knowledge and understanding of flood risk within Greenwich.

B. Maximise sustainability and biodiversity benefits to Greenwich by taking a holistic approach to flood risk management through the use of natural flood management (NFM).

C. Reduce the risk of flooding to the community in Greenwich by delivering targeted flood alleviation schemes (FASs) and encouraging the use of sustainable drainage systems (SuDS).

D. Investigate new funding opportunities available to develop flood risk management within Greenwich.

E. Improve community awareness and preparedness of flood risk within the borough.

These objectives are assessed against the identified SEA objectives as part of the screening analysis in Section 6.

1.5 Consultation Process

Under Article 3 of the European SEA Directive (2001), Strategic Environmental Assessments (SEAs) are mandatory for any local plan, programme, or strategy that relates to topics such as water management. As a statutory strategy, RBG LFRMS therefore requires an SEA. In addition, completing this SEA satisfies the requirements of the FWMA, which states that the LFRMS must demonstrate how it supports broader environmental objectives.

This SEA Screening Report must be reviewed by the statutory environmental consultees: the Environment Agency, Natural England, and Historic England. As part of this review, the consultees were provided with consultation questions included at the end of each section of the report. Their feedback was considered and used to inform an updated version of the document.

Following this, a public consultation was held from 23/03/2026 to 04/05/2026 during which members of the public, internal stakeholders, and external organisations were invited to comment on the report. Suggested amendments received during this process will be reviewed and incorporated into the final version of the document where appropriate.

2 Identification of Relevant Policies

2.1 Task A1

Task A1 is to identify relevant policies, plans, and programmes and environmental protection objectives. This has been completed by collating all appropriate policies, documents, and legislation that have the potential to affect or influence the LFRMS in relation to the SEA's purpose.

2.2 Relevant Policies

It is important to consider relevant policies and legislation at a range of levels including international, national, regional, and local. These policies are presented below in Table 2.1.

Table 2.1: Relevant Policies, documents, plans and legislation to the SEA

International
UNESCO World Heritage Convention (1972)
Convention for the Protection of the Architectural Heritage of Europe (1985)
EU Habitats Directive (1992)
The Valletta Treaty *(formally European Convention on the Protection of Archaeological Heritage)* (1992)
EU Water Framework Directive (2000)
European Landscape Convention (2000)
European SEA Directive (2001)
EU Floods Directive (2007)
EU Birds Directive (2009)
EU Biodiversity Strategy for 2030 (2020)
National
Ancient Monuments & Archaeological Areas Act (1979)
Wildlife and Countryside Act (1981)
Environmental Protection Act (1990)
Planning (Listed Buildings & Conservation Areas) Act (1990)
Land Drainage Act (1991)
The UK Biodiversity Action Plan (1994)
Civil Contingencies Act (2004)
Natural Environment and Rural Communities Act (2006)
The Pitt Review - Lessons learned from the 2007 summer floods (2007)
The SuDS Manual C753F (2015)
Climate Change Act (2008)
Future Water: The Government's Water Strategy for England (2008)
Flood Risk Regulations (2009)
Flood and Water Management Act (2010)
Biodiversity 2020: A strategy for England's wildlife and ecosystem services (2011)
National standards for sustainable drainage systems (SuDS) - GOV.UK (2025)
Environmental Permitting Regulations (2016)

DEFRA: 25 Year Environment Plan (2018)
National Flood and Coastal Erosion Risk Management (FCERM) Strategy for England (2020)
Meeting our Future Water Needs: A National Framework for Water Resources (2020)
Environment Act (2021)
National Planning Policy Framework (2012, revised 2024)
National Planning Practice Guidance (2016, revised 2022)
Regional
Thames Catchment Flood Risk Management Plan (2009)
Mayor of London's Climate Change Adaptation Strategy (2011)
Thames Estuary 2100 Flood Risk Management Plan (2012)
Thames River Basin District, River Basin Management Plan (2015)
London Regional Flood Risk Appraisal (2018)
London Environment Strategy (2018)
Zero carbon London: A 1.5ºC compatible plan (2018)
The London Plan (2021)
Thames Estuary 2100: 10-Year Review (2022)
Thames Estuary 2100 Plan (2023)
Local
Strategic flood risk assessment Greenwich | Royal Borough of Greenwich (2017)
Biodiversity Action Plan | Royal Borough of Greenwich
Local Plan Climate Change and Carbon Reduction Topic Report
The Local Plan | Royal Borough of Greenwich (2014)
Royal Borough of Greenwich Air Quality Action Plan 2023-2027
Local Flood Risk Management Strategy 2026

2.3 Task A1 consultation questions

Based on the screening analysis conducted, questions shall be asked during the consultation exercise as shown below.

1. Do you feel we have included all relevant policies, documents, plans and legislation that relate to or could affect the LFRMS?

2. If not, which additional documentation do you think should be included?

3 Baseline Information

3.1 Task A2 Summary

Task A2 involves collecting baseline information from a range of sources to identify any key environmental, social, and economic issues that may exist in RBG. The focus of the SEA is on environmental effects; however, social and economic information has been included to widen the scope of potential impacts being considered.

The SEA should be proportional to the length of the LFRMS. As a result, baseline information that directly affects flood risk and/or those likely to influence the environmental issues highlighted within this SEA Screening Report have been included.

3.2 RBG Borough Characteristics

RBG is a south-east London borough, covering an area of 4,730 hectares. This area is comprised of a mix of urban centres, residential neighbourhoods, historic landmarks, open green space, and the riverside along the Thames. RBG is well known for its maritime heritage, with its main metropolitan centre in RBG town centre. RBG is home to several Strategic Industrial Locations (SILs), notably Charlton Riverside and Woolwich, which are key to the borough's employment and economic developments that include housing, public amenities, and commercial spaces.

The borough also benefits from substantial green infrastructure, including Metropolitan Open Land (MOL), local parks, and green corridors that support biodiversity and contribute to residents' wellbeing. Parks such as Greenwich Park, Oxleas Wood, Maryon Park, and Sutcliffe Park provide valuable recreational space and help support climate resilience. RBG contains 55 Sites of Importance for Nature Conservation (SINCs), protecting key habitats across the borough, many of which are supported through local planning and conservation initiatives.

Transport links in RBG are extensive, with several major roads, including the A2, A206 and A102 Blackwall Tunnel Approach providing road connectivity across the borough. Public transport is served by Southeastern Rail, the Docklands Light Railway (DLR), Thameslink service, and the Elizabeth Line, connecting town and district centres to central London and beyond. The borough also benefits from river transport via Thames Clippers and a growing network of walking and cycling routes.

3.3 Baseline Information

3.3.1 Biodiversity, Flora and Fauna

RBG has a distinct and diverse mix of habitats and species, which are found within its woodlands, meadows, parks, green corridors, and public gardens. Many of these areas have remained relatively undisturbed, serving as refuges from surrounding urban development. While several species have adapted to the pressures of the urban environment and do not require specialised habitats, others are more sensitive to human disturbances. Through the Borough's Biodiversity Action Plan, six priority habitats were identified:

- Acid grassland and heathland
- Gardens
- Parks and green spaces
- Wasteland
- Waters' edge, rivers, ponds and wetland
- Woodland

Priority species were also identified for the borough, comprising bats, black poplar, black redstart, hedgehog, stag beetle and water voles.

RBG has 5 nature reserves and 55 SINCs (Appendix A), along with two Sites of Special Scientific Interest (SSSIs) (

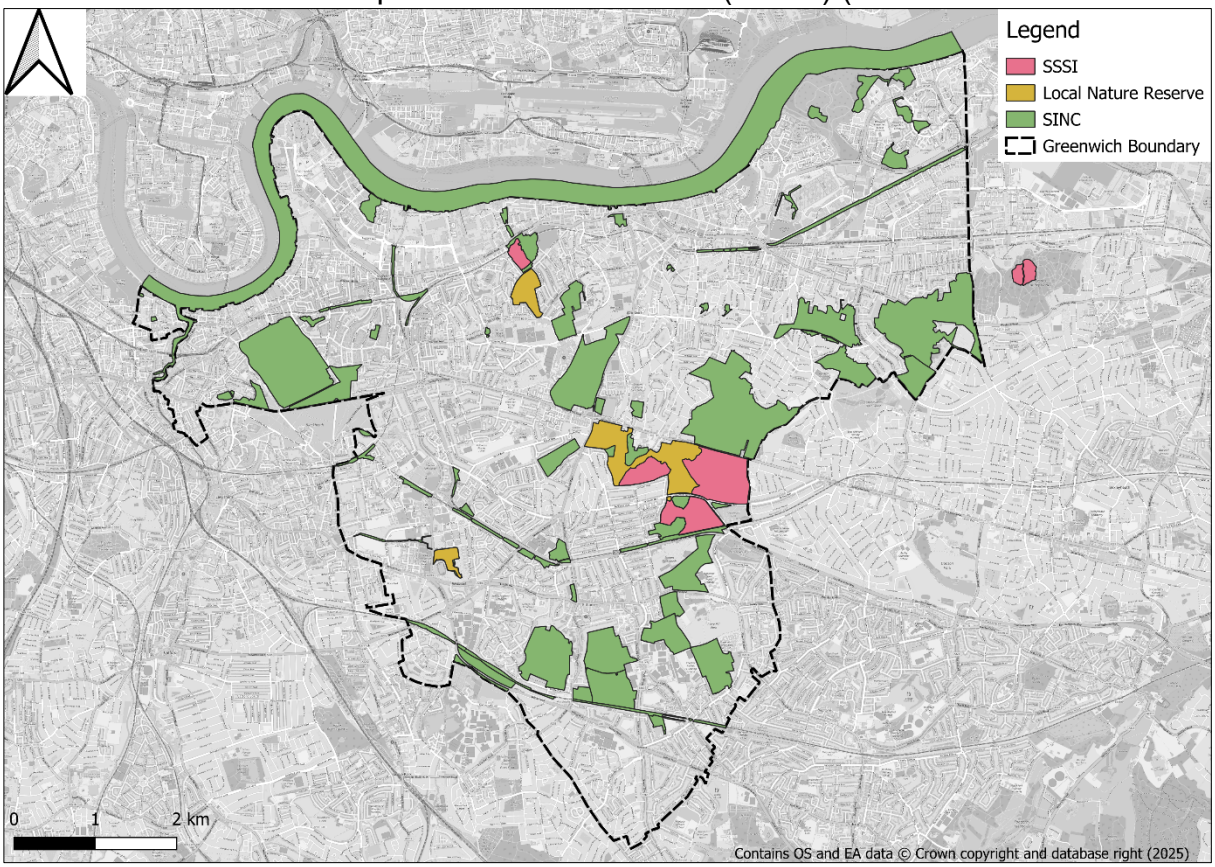


Figure 1: Green Spaces Designations within RBG

). The table below lists the SSSI, Nature Reserves and some of the largest SINCS within RBG.

Table 3.1: Green Spaces Designations in RBG

Designation	Number of Sites	Site Names
Sites of Special Scientific Interest	2	• Gilberts Pit • Oxleas Woodlands
Local Nature Reserves	5	• Lesnes Abbey Woods • Maryon Wilson Park • Gilberts Pit • Oxleas Wood • Sutcliffe Park
Sites of Importance of Nature Conservation	55	Including: • The River Thames and tidal tributaries • Blackheath and Greenwich Park • Shrewsbury Park, Shooters Hill Golf Course, Dothill Allotments and Woodlands Farm

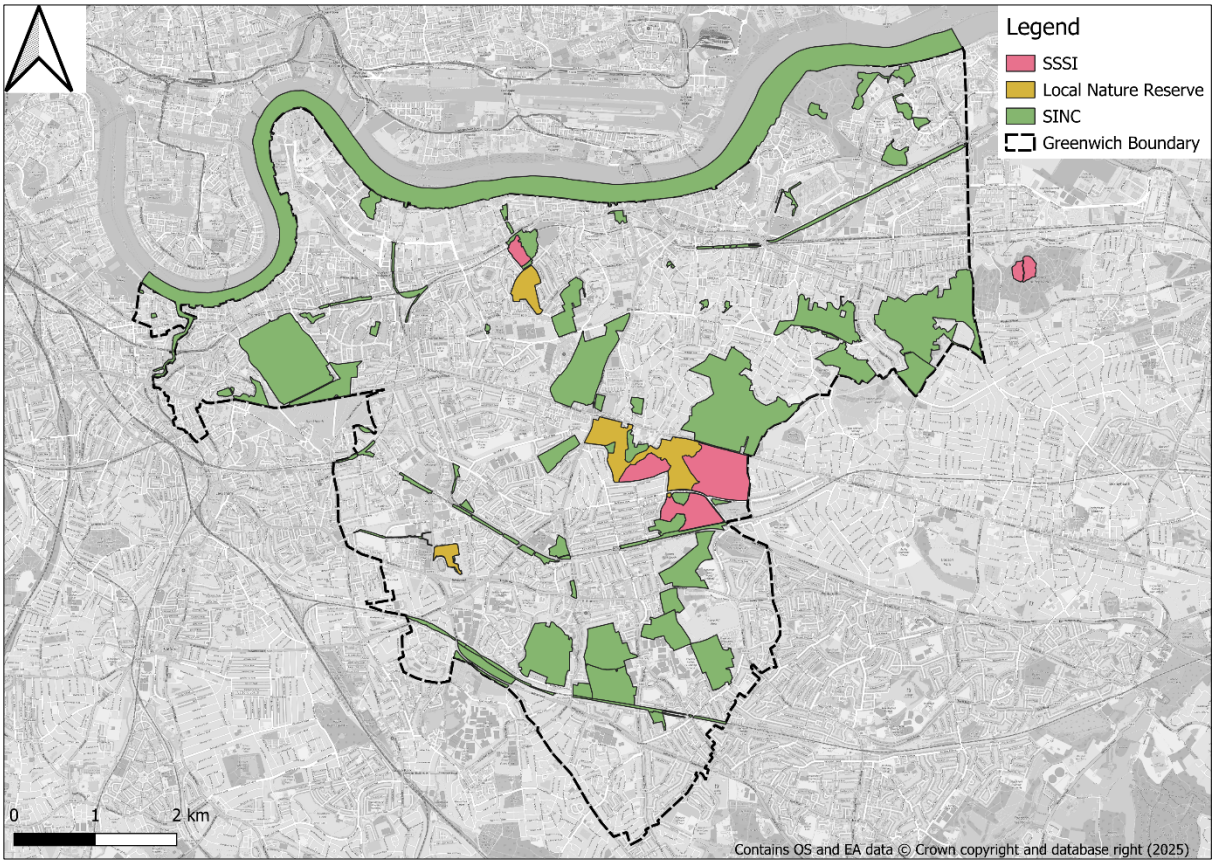


Figure 1: Green Spaces Designations within RBG

3.3.2 Infrastructure Assets

RBG benefits from strong transport connections, including National Rail Services, the Docklands Light Railway (DLR), and the London Underground's Jubilee Line at North Greenwich. It is also served by an extensive bus network and major roads such as the A2, A102, and the A205. Recent improvements, including the introduction of the Elizabeth Line at Woolwich station, have enhanced travel options across the borough and beyond. While sustainable travel options like walking, cycling, and public transport are increasingly popular, some parts of the borough, particularly in the south and east, remain less well connected.

RBG offers a diverse range of community facilities covering health, education, leisure, culture, and sport, providing valuable services to residents and visitors. The borough's Local Plan highlights the importance of parks and open spaces as key components of community infrastructure, with over 150 parks and open spaces within the borough, including Greenwich Park and Oxleas Wood. Many of these sites are publicly accessible and play a crucial role in supporting the wellbeing and ecological diversity of the borough.

3.3.3 Population

In the most recent ONS census in March 2021, RBG experienced a 13.6% population increase, with the local population totalling 289,100. In 2021, the area was among the top 10% most densely populated Local Authority areas in England. RBG has a median age of 35 years old; this is a similar median age to London but a lower median age in comparison to England.

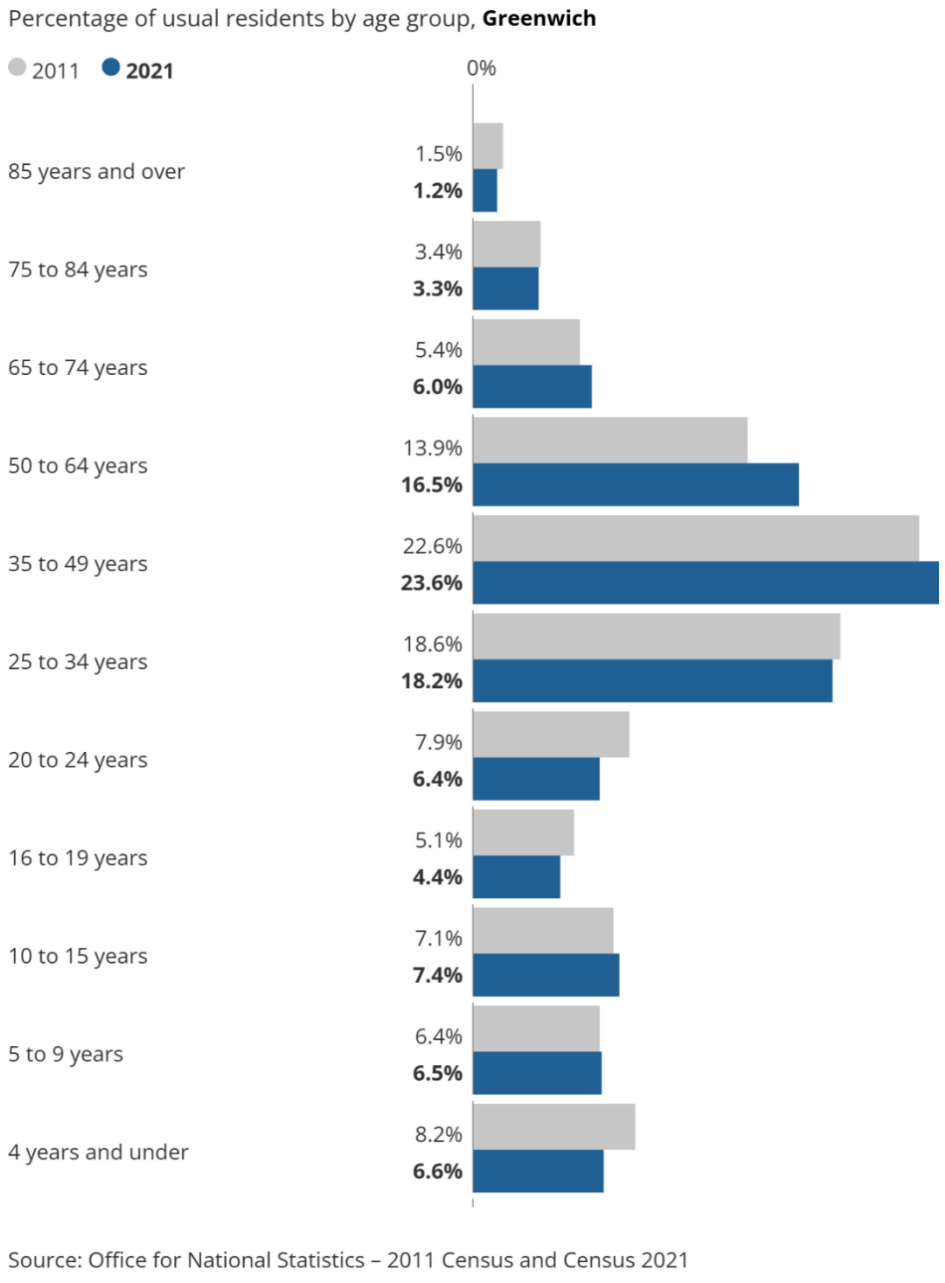


Figure 2: RBG age profile from the 2011 and 2021 ONS Census

RBG has slightly more female residents (51.4%) than male (48.6%). RBG has around a 50% White British population, along with significant Black African and Black Caribbean populations, and growing communities of people of Asian heritage.

Population growth in RBG drives the need for new housing development to meet local demand. According to RBG Local Plan and Housing Needs Assessment (2023), the borough requires around 2,300 new homes per year between the period of 2025-2038. Due to limited availability of greenfield land, much of this development will need to focus on regeneration and redevelopment of previously developed sites, including brownfield land, to accommodate future housing needs sustainably.

3.3.4 Public Health

The ONS 2021 census disclosed that 75% of RBG residents described their health as 'very good' or 'good', 13.6% of residents described their health as 'fair'. 4.7% described their health as 'bad' and 1.5% as 'very bad'. The proportion of residents in fair, bad or very bad health (19.8%) was above that of England and Wales (17.9%).

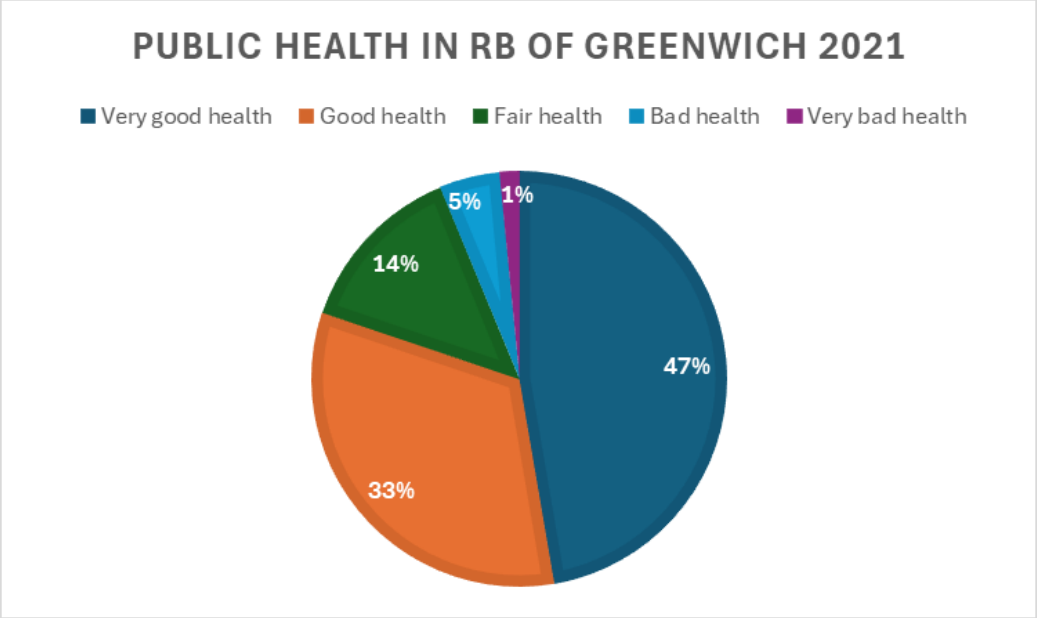


Figure 3: Pie Chart of Public Health in RBG (ONS 2021 Census)

The average life expectancy in RBG is about 79.5 years for males and 83 years for females, very similar to the England averages. However, there are inequalities in life expectancy, with male life expectancy being 5.5 years lower in the most deprived areas. Female life expectancy has around a 6-year gap between those in the least and most deprived areas.

3.3.5 Air Quality

The UK Clean Air Strategy (2019) provides the national framework for air quality management and sets legal objectives to protect human health. RBG Air Quality Action Plan (2023-2027) sets out the borough's priorities for improving air quality. RBG currently meets all national air quality objectives except for Nitrogen Dioxide (NO_2) at a few locations, such as Plumstead Road, where annual mean levels exceed the UK objective of 40µgm^3. The borough meets the national objectives for Particulate Matter (PM10 and PM2.5). However, the UK legal limit for PM2.5 is significantly higher than the World Health Organisations recommended guidelines. This means that the council retains a duty to aim towards lowering PM2.5 concentrations across the borough.

RBG has declared the entire borough as an Air Quality Management Area (AQMA) since 2001 due to exceedance of both NO_2 and PM10. The council operate a network of 10 real-time monitoring stations and over 50 diffusion tubes, informing targeted action. Priority zones are generally located along major transport corridors, including the A2, A206, A102 and areas surrounding Charlton and Greenwich town centres, all of which experience high volumes of traffic and subsequent elevated pollution levels.

The Air Quality Action Plan outlines a comprehensive set of measures, including promoting active travel, enhancing infrastructure for electric vehicles, implementing controls in planning for cleaner development, improving green infrastructure, and targeting emissions around schools and transport hubs to reduce exposure in the most impacted areas.

3.3.6 Climate Change

The 2023 Synthesis Report from the Intergovernmental Panel on Climate Change (IPCC) warns that global temperatures are likely to rise by 1.5 °C within this century due to human-induced greenhouse gas emissions. One of the key consequences of this warming is an increase in the frequency and severity of heavy rainfall events, which is expected to heighten the risk of flooding from various sources. This will put additional strain on public health, infrastructure, and the natural environment.

RBG, like much of London, is particularly exposed to the urban heat island effect, where built-up areas absorb and retain heat more than surrounding rural areas. As extreme heat becomes more common, risks to human health grow. Higher temperatures can also lead to rail tracks to buckle leading to major disruptions.

In recognition of the growing climate emergency, in 2019 RBG Council made a formal commitment to reach net zero carbon emissions for its own operations by 2025 and to become a net zero carbon borough by 2045 or sooner. This pledge is part of a broader ambition to build a greener, cleaner, more climate-resilient future for those who live and work in the borough.

3.3.7 Water Environment

RBG's natural topography generally slopes northward and eastward towards the River Thames, influencing the movement of surface water, which typically drains in the same direction. This flow pattern plays an important role in local surface water runoff and flood risk, particularly during heavy rainfall.

The management and assessment of water quality across the borough falls under the EU Water Framework Directive (WFD), which classifies bodies of water according to ecological and chemical health. Each watercourse is also assessed based on the degree to which it has been physically modified from its natural state. In RBG, the key water bodies, including the Thames, Ravensbourne, Quaggy and Shuttle rivers are classified as 'heavily modified' and are currently rated below the target standards for ecological and chemical status. These classifications highlight ongoing challenges around water quality, habitat condition, and pollution control.

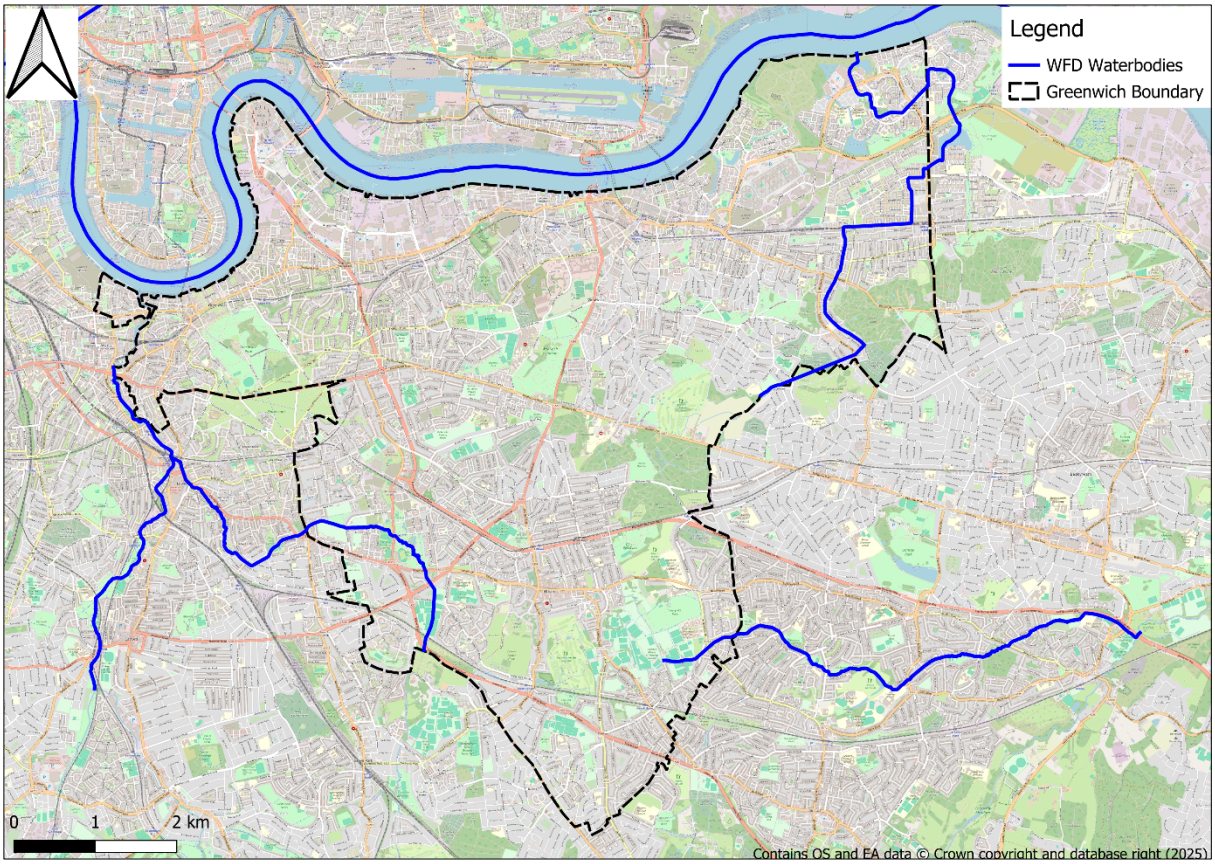


Figure 4: WFD Waterbodies Within RBG

3.3.8 Soils and Geology

The borough sits mainly atop the London Clay formation. London Clay bedrock is characterised by low permeability, meaning water does not pass through it easily. As a result of this, it has limited significance as a groundwater resource. In some parts of the borough closer to the Thames, other geological layers such as the Lambeth Group and Thanet Sand Formation are present. These formations can vary in their capacity to store and transmit water, with some layers acting as minor aquifers.

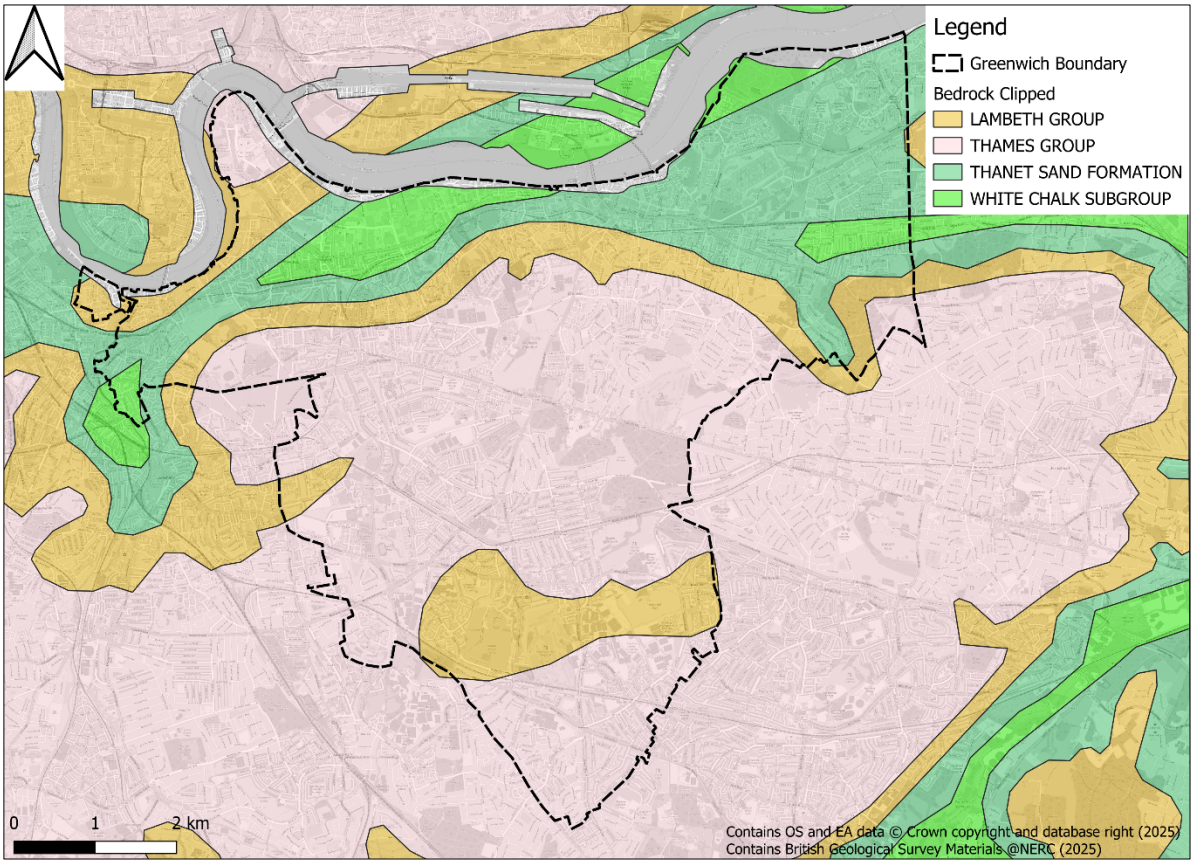


Figure 5: Bedrock of RBG

Above the bedrock, the borough's superficial deposits include alluvium (loose soil and sediment, typically deposited by rivers) particularly along the Thames and in lower lying areas. This alluvium has mixed permeability, meaning it may either hold or transmit water dependent on its composition. Areas with sand and gravel deposits are more permeable and can more readily absorb and transmit water, influencing groundwater recharge and drainage characteristics.

3.3.9 Historic and Cultural Environment

RBG is home to a diverse range of heritage assets that contribute to the borough's distinctive historic and cultural character. These heritage assets are catalogued by Historic England and the Royal Borough of Greenwich, and their locations can be explored on the Historic England map. Found at Historic England.

Heritage assets in the borough are broadly categorised as the following:

Designated Heritage Assets - These include World Heritage Sites, Scheduled Monuments, Listed Buildings (Grades I, II* and II), Registered Parks and Gardens, Conservation areas, and London Squares designated under relevant legislation.

Non-Designated Heritage Assets - These consist of buildings and structures of local significance identified by the Council or Mayor of London, such as Locally Listed Buildings and other heritage assets without statutory protection but with local importance.

Table 3.2: Heritage Assets within RBG

Heritage Asset Type		Amount	Examples of Assets
World Heritage Site		1	• Maritime Greenwich
Scheduled Monuments		12	• Bellot Memorial • Conduit Head
Conservation Areas		23	• Greenwich • Woolwich Common
Registered Parks and Gardens		12	• Greenwich Park
Statutory Listed Buildings	Grade I	28	• Royal Observatory • Charlton House
	Grade II*	45	• Trinity Hospital • Woolwich Town Hall
	Grade II	468	• Eltham War Memorial • Raynes Wharf
Locally Listed Buildings and Structures		Over 500	• Guildford Arms Public House • Woolwich Public Baths • Blackheath Gate Lodge

In addition to its heritage assets, RBG has a strong cultural and economic identity shaped by its local markets, creative industries, and active night-time economy. Key markets include Greenwich market, Woolwich market, and Eltham Market, which provide a platform for local businesses and community interaction.

Cultural and entertainment hubs such as Greenwich Town Centre, Woolwich, and Eltham offer a range of theatres, galleries, music venues, and restaurants. Notable venues include the O2 Arena, Greenwich Theatre, Tramshed Arts Centre, and a number of historic pubs and live performance spaces. Together, these amenities support a growing arts and cultural scene that reinforces the borough's identity as a creative and historic destination.

3.4 Task A2 Consultation Questions

3. Do you agree that the baseline data included herein is appropriate to the LFRMS that is being developed?

4. Do you have, or know of, any additional baseline indicators or data that should be incorporated into this SEA screening assessment?

5. As far as you are aware, is the baseline data accurate and up to date?

4 Identification of Environmental Issues

4.1 Task A3 Summary

Task A3 involves identifying existing or potential future environmental issues that could affect, or be affected by, the implementation of the LFRMS. These environmental issues have been identified through a review of the policies listed in Task A1, alongside an analysis of the baseline information collated during that task.

4.2 Local Environmental Issues

Table 4-1 summarises the environmental issues identified as part of Task A3, outlining each issue, the potential associated impacts, and the corresponding LFRMS strategic objective that addresses or aims to improve the issue through targeted actions.

Table 4.1: Identified Key Environmental Issues in RBG

Key Environmental Issues	Potential Associated Problem	LFRMS Strategic Objective to Target this Issue
Rapid Population Increase	• Larger number of residents at risk from flooding events • Greater demand for new housing and infrastructure to accommodate population growth • Increase in homelessness and socio-economic inequality • Heightened pressure on existing public services and community facilities • Elevated risk of disease transmission • Increased levels of pollution and waste entering the river system	A, C, E
Low Air Quality	• Rise in respiratory conditions such as asthma and Chronic Obstructive Pulmonary Disease, as well as cardiovascular disease and certain cancers • Increased mortality and morbidity rates • Decline in average life expectancy • Greater burden on healthcare systems and wellbeing services	B
Change of land use and increased density of new developments	• Expansion of impermeable surfaces, leading to higher volumes of surface water run-off and elevated flood risk • Reduction in access to green and open spaces, diminishing mental and physical health benefits • Exacerbation of the Urban Heat Island effect, driving up energy usage and cost • Degradation of townscape character and reduced protection of heritage assets • Growing inequalities in access to high-quality green and blue spaces • Loss of habitat and threat to protected species.	A, B, C, E

Reduction in the quality of waterbodies	• Increased likelihood of failing to meet WFD targets • Adverse impacts on aquatic ecosystems and biodiversity • Diminished potential for water-based recreation and leisure activities	B, C
Increasing CO_2 emissions contributing to local and global climate change	• Higher risk of property and infrastructure damage due to more frequent and intense storm and flood events • Increased health risks from more frequent and severe heatwaves • Elevated greenhouse gas emissions contributing to both local and global climate instability	A, B, C, D, E
Decline, damage, or neglect of historical and cultural assets	• Irreversible damage to heritage sites caused by flooding and extreme weather • Negative impacts from flood protection infrastructure on the significance of heritage assets • Decline in cultural tourism and local economic activity • Loss of recreational and cultural value for local communities	A, C, D
Urban Heat Island Effect	• Intensified heat retention in urban areas, raising indoor and outdoor temperatures • Increased energy consumption for cooling buildings, driving up emissions and utility costs • Altered precipitation patterns, with warmer air holding more moisture, leading to more intense rainfall and flood risk	B, C
Loss of Greenspace and Biodiversity	• Fragmentation or loss of habitats leading to reduced species richness and ecosystem resilience • Decline in air and water quality due to fewer natural filters • Decreased opportunities for nature- based recreation and community wellbeing • Reduced carbon sequestration capacity, worsening climate impacts • Loss of pollinators and ecosystem services critical to local agriculture and green infrastructure	B, C, E

4.3 Task A3 Consultation Questions

6. Do you agree that the SEA Screening Report has identified the main environmental issues relating to the LFRMS affecting the Royal Borough of Greenwich? If not, please provide details.

7. Are there any other environmental issues that you believe should be addressed within this SEA Screening Report? If so, please provide details.

8. Do you believe that any of the identified environmental issues do not affect the Royal Borough of Greenwich? If so, please provide details.

5 SEA Objectives

5.1 Task A4 Summary

Task A4 focuses on developing a set of SEA objectives informed by the environmental issues identified in Task A3 Summary, alongside local knowledge and understanding of flood risk management within RBG. These SEA objectives provide the basis for evaluating the potential environmental impacts of implementing the LFRMS and its associated actions.

5.2 SEA Objectives

The following SEA objectives have been identified to address the key environmental issues identified in Task A3:

• **SEA 1**: Ensure all of RBG's critical infrastructure has sufficient protection from flooding.

• **SEA 2**: Ensure RBG's increasing population is adequately housed, with flood risk prioritised within developments.

• **SEA 3**: Ensure vulnerable residents and residents in deprived areas have access to the services and resources needed before, during, and after a flooding event.

• **SEA 4**: Promote air and water quality improvement through flood risk interventions.

• **SEA 5**: Promote sustainable development to reduce and mitigate the potential impacts of climate change, therefore improving resilience to flooding events and improving biodiversity and amenity.

• **SEA 6**: Safeguard cultural and heritage assets and ensure they are made resilient to flooding, without affecting the integrity of the asset.

• **SEA 7**: Improve the status of all WFD waterbodies within the borough, where possible.

5.3 Task A4 Consultation Questions

9. Do you agree that these proposed SEA objectives are the most suitable in the context of the Royal Borough of Greenwich? If not, which objectives are unsuitable and why?

10. Are there any other SEA objectives that you believe should be included? If so, please provide details.

6 Screening Analysis of the Local Flood Risk Management Strategy

6.1 Task A5 Summary

Task A5 involves assessing the potential impacts of implementing the strategic objectives of the LFRMS against each of the seven SEA objectives. The aim is to identify and evaluate any environmental effect resulting from the delivery of the LFRMS. The outcome of this assessment is presented below in Sections 6.2 and 6.3.

6.2 Screening Analysis

Table 6-1 summarises the outcomes of the screening analysis. The scoring criteria for this qualitative analysis is listed in Table 6.2 outlines the justification for the decisions.

Table 6.1: Scoring matrix of LFRMS Strategic Objectives against SEA objectives

		SEA Objective Number						
		SEA1	SEA2	SEA3	SEA4	SEA5	SEA6	SEA7
LFRMS Strategic Objectives	A	++	0	+	0	+	0	+
	B	+	0	+	+	++	+	++
	C	++	+	++	0	+	0	+
	D	+	+	+	0	+	0	+
	E	+	0	++	+	+	0	+

Table 6.2: Scoring Criteria for Table 6-1

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

6.3 Screening Analysis Outcomes

6.3.1 LFRMS Strategic Objective A: Improve knowledge and understanding of flood risk within Greenwich

Improving the knowledge and understanding of flood risk in RBG will have a positive impact on most of the SEA objectives. There were no negative effects identified, and therefore, Strategic Objective A can be screened out at this stage.

Table 6.3: LFRMS Strategic Objective A Screening Analysis

Effect on SEA Objective	SEA Objective	Justification
Major Positive	SEA1	Improved understanding directly supports protecting critical infrastructure from flooding
Minor Positive	SEA3	Increased awareness may help in planning support systems for vulnerable residents
	SEA5	Understanding risks aids sustainable development planning
	SEA7	Knowledge supports better ecological planning and enforcement
Neutral	SEA2	This SEA objective has little/no correlation to Strategic Objective A
	SEA4	This SEA objective has little/no correlation to Strategic Objective A
	SEA6	This SEA objective has little/no correlation to Strategic Objective A
Minor Negative	N/A	None of the SEA objectives will be negatively impacted by Strategic Objective A
Major Negative	N/A	None of the SEA objectives will be negatively impacted by Strategic Objective A
Uncertain	N/A	There were no uncertainties when assessing LFRMS Strategic Objective A with any of the SEA objectives.

6.3.2 LFRMS Strategic Objective B: Maximise sustainability and biodiversity benefits to Greenwich by taking a holistic approach to flood risk management through the use of natural flood management (NFM)

Maximising sustainability and biodiversity benefits to RBG through taking a holistic approach to flood risk management through the use of NFM will have a positive effect on most of the SEA objectives. There were no negative effects identified, and therefore Strategic Objective B can be screened out at this stage.

Table 6.4 : LFRMS Strategic Objective B Screening Analysis

Effect on SEA Objective	SEA Objective	Justification
Major Positive	SEA5	NFM directly supports sustainable development and biodiversity
	SEA7	NFM is proven to improve watercourse ecology, aligning with WFD goals
Minor Positive	SEA1	NFM can enhance resilience, but less direct than traditional protection methods
	SEA3	Indirectly supports vulnerable populations through reducing flood risk
	SEA4	Community based NFM can engage residents in outdoor/green activities
	SEA6	NFM directly supports sustainable development and climate
Neutral	SEA2	NFM does not directly influence housing
Minor Negative	N/A	None of the SEA objectives will be negatively impacted by Strategic Objective B
Major Negative	N/A	None of the SEA objectives will be negatively impacted by Strategic Objective
Uncertain	N/A	There were no uncertainties when assessing LFRMS Strategic Objective B with any of the SEA objectives

6.3.3 LFRMS Strategic Objective C: Reduce the risk of flooding to the community in Greenwich by delivering targeted flood alleviation schemes (FASs) and encouraging the use of sustainable drainage systems (SuDS)

Reducing the risk of flooding to the community in RBG by delivering targeted flood alleviation schemes and encouraging the use of sustainable drainage systems will have a positive effect on most of the SEA objectives. There were no negative effects identified, and therefore Strategic Objective C can be screened out at this stage.

Table 6.5: LFRMS Strategic Objective C Screening Analysis

Effect on SEA Objective	SEA Objective	Justification
Major Positive	SEA1	FAS provide direct protection to critical infrastructure
	SEA3	Targeted schemes directly protect vulnerable residents
Minor Positive	SEA2	Reduced flood risk supports housing viability
	SEA5	SuDS support climate resilience and sustainability
	SEA7	SuDS can enhance local ecological quality
Neutral	SEA4	No direct impact on obesity or community health
	SEA6	FAS and SuDS are not directly aimed at heritage asset conservation
Minor Negative	N/A	None of the SEA objectives will be negatively impacted by Strategic Objective C
Major Negative	N/A	None of the SEA objectives will be negatively impacted by Strategic Objective C
Uncertain	N/A	There were no uncertainties when assessing LFRMS Strategic Objective C with any of the SEA objectives

6.3.4 LFRMS Strategic Objective D: Investigate new funding opportunities available to develop flood risk management within Greenwich.

Investigating new funding opportunities available to develop flood risk management within RBG will have a positive impact on most of the SEA objectives. There were no negative effects identified and therefore, Strategic Objective D can be screened out at this stage.

Table 6.6: LFRMS Strategic Objective D Screening Analysis

Effect on SEA Objective	SEA Objective	Justification
Major Positive	N/A	No major positives were identified when assessing Strategic Objective D with any of the SEA objectives
Minor Positive	SEA1	Additional funding could lead to better infrastructure protection
	SEA2	Could indirectly support housing resilience
	SEA3	May fund emergency support systems for vulnerable people
	SEA5	Funding could enable flood risk management interventions to be delivered
	SEA7	Funding could support ecological improvements
Neutral	SEA4	No direct impact on obesity or community health
	SEA6	Impact on heritage is dependent on what is funded
Minor Negative	N/A	None of the SEA objectives will be negatively impacted by Strategic Objective D
Major Negative	N/A	None of the SEA objectives will be negatively impacted by Strategic Objective D
Uncertain	N/A	There were no uncertainties when assessing LFRMS Strategic Objective D with any of the SEA objectives

6.3.5 LFRMS Strategic Objective E: Improve community awareness and preparedness of flood risk within the borough

Improving community awareness and preparedness of flood risk within the borough will have a positive impact on most of the SEA objectives. There were no negative impacts identified, and therefore, Strategic Objective E can be screened out at this stage.

Table 6.7: LFRMS Strategic Objective E screening analysis

Effect on SEA Objective	SEA Objective	Justification
Major Positive	SEA3	Community preparedness is vital for protecting vulnerable residents
Minor Positive	SEA1	Awareness supports better infrastructure use and emergency response
	SEA4	Engagement activities may support healthier lifestyles
	SEA5	Improved awareness could promote sustainable behaviours
	SEA7	Awareness can lead to better community stewardship of local waterbodies
Neutral	SEA2	Doesn't directly impact upon housing provision
	SEA6	Doesn't directly enhance heritage conservation
Minor Negative	N/A	None of the SEA objectives will be negatively impacted by Strategic Objective E
Major Negative	N/A	None of the SEA objectives will be negatively impacted by Strategic Objective E
Uncertain	N/A	There were no uncertainties when assessing LFRMS Strategic Objective E with any of the SEA objectives

6.4 Task A5 Consultation Questions

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

7 Conclusions

7.1 Conclusions

This SEA Screening Report concludes that the proposed Strategic Objectives of the LFRMS are unlikely to result in any adverse effects on the environmental issues identified within the Royal Borough of Greenwich. Furthermore, each of the Strategic Objectives is expected to have a positive impact on at least one of the SEA objectives.

Based on this assessment, it is determined that the LFRMS has appropriately considered the social, economic, and environmental implications of its proposed actions. Therefore, the strategy does not need to proceed to Stage B of the SEA process, and a full SEA is not required at this time.

The LFRMS will be subject to an internal review on an annual basis, and a comprehensive public review every six years. As part of this review process, an updated SEA screening will be carried out in accordance with the requirements of the SEA Directive. Should any potential negative environmental impacts be identified in future updates of the LFRMS, a full SEA will be undertaken, and alternative measures will be proposed to mitigate any such impacts.

7.2 Final Consultation Questions

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

8 Appendix

8.1 Appendix A

List of SINCs

Woolwich Cemeteries and Rockliffe Gardens
Eltham Park North
Deansfield
Royal Blackheath Golf Course – south fairways
Gallions Reach Park
Avery Hill Fields
The Ridgeway in Greenwich
Eastmoor Street Park
Blackheath to Falconwood Railsides
Westcombe Park Railsides
Mottingham and New Eltham Railsides
Plumstead Railway Cutting
Belmarsh Prison Ditches
St Nicholas Churchyard, Deptford
Sutcliffe Park
River Ravensbourne in Greenwich
River Quaggy at Blackheath Park
Eltham Palace Fields
Twinkle Park
Well Hall Pleasaunce
East Wickham Open Space
Mycenae House Gardens
Academy Place Orchard
St Mary's Churchyard, Woolwich
Southwood Recreation Ground
The Oaks, Plumstead
Anglesea Road Open Space & School Wildlife Area
The Tarn
St John the Baptist Churchyard

- Eaglesfield Wood
- Blackheath and Greenwich Park
- Repository Wood and Charlton Cemetery
- Plumstead Cemetery
- Charlton House Lawns
- Sidcup Road Grassland and Harmony Wood
- Plumstead Common (Winn's Common, Bleak Hill,
- and The Slade)
- Maryon Park, Gilbert's Pit and Maryon Wilson Park
- Eltham Warren Golf Course, Gravel Pit Lane, and the
- Nature Study Centre
- Shrewsbury Park, Shooters Hill Golf Course,
- Dothill Allotments and Woodlands Farm
- Thamesmead wetland and historic area
- Greenwich Ecology Park and Southern Park
- Oxleas Meadow
- Birchmere
- Woolwich Common
- Tump 53 Nature Park
- Greenwich Cemetery
- Twin Tumps and Thamesmere
- The Westcombe Woodlands
- Plumstead Common Local Nature Reserve
- The River Thames and tidal tributaries
- Kidbrooke Green and Birdbrook Road Nature Reserves
- Royal Blackheath Golf Course
- Pippenhall Meadows
- Bostall Wood & Heath
- Shooters Hill Woodlands