Part 2
Findings

4. The Newham context

Policy and governance context

National planning context

Environment Act (2021)

4.1. The Environment Act provides binding targets on air and water quality and enshrines the concept of biodiversity offsetting and net gain.

National Planning Policy Framework (NPPF) (2021)

4.2. The NPPF defines planning policy for all local authorities in England and is the reference document for all Local Plans produced by planning authorities. The environment is one of the three overarching objectives which need to be balanced in order to deliver sustainable development.

Biodiversity Net Gain

4.3. Biodiversity in Newham, in common with elsewhere in London, is generally in decline. This is a result of direct effects such as increased development, loss of vegetated gardens and recreational pressure on green space, as well as indirect effects such as climate change, which is disrupting species' life cycles and seasonal patterns of migration.

4.4. London Plan policy requires the protection of Sites of Importance for Nature Conservation (SINCs) and the protection and conservation of priority species and habitats that sit outside the SINC network. This provides the core policy framework for conserving biodiversity. However, policy recognises that where harm to a SINC is unavoidable, and where the benefits of development clearly outweigh the impacts on biodiversity, proposals should:

- avoid damaging the significant ecological features of the site
- minimise the overall spatial impact and mitigate it by improving the quality or management of the rest of the site
- deliver off-site compensation of better biodiversity value

4.5. National government has recognised the challenges of meeting biodiversity objectives alongside national and regional policies promoting economic growth and meeting housing need. Consequently, the Environment Act 2021 introduced a requirement for new development to leave the natural environment in a measurably better state than it was beforehand by ensuring that all new development delivers a minimum 10% Biodiversity Net Gain (BNG) either on the development site or, if this is not feasible, as an offset elsewhere. This requirement becomes mandatory in November 2023.

4.6. BNG is calculated using the approved Defra Biodiversity Metric. It uses a spreadsheet-based calculator to determine the total number of habitat units present on a site prior to development and the total number of habitat units retained, enhanced or created as a result of the development proposal. The BNG score results from subtracting the habitat unit value of the existing habitats from the habitat unit value of the proposed habitats and presenting this as a percentage change.

4.7. A key principle of the BNG approach is that the score provided by the calculator should not be the only factor determining whether a proposal has achieved a better outcome for biodiversity. The context of the proposal should also be considered, especially the other environmental benefits that can be achieved by delivery of green infrastructure and/or nature-based solutions that can address the impacts of climate change or improve public health.

4.8. BNG will be delivered through the land use planning process, and planning consent will not be granted without the mandatory requirement being met.

4.9. Although 10% is the minimum mandatory requirement, local authorities have the scope to require a higher BNG through planning policy. As yet a minority of London Boroughs has opted to propose policy requiring a BNG score higher than the forthcoming mandatory requirement.

4.10. A 10% increase in Biodiversity Net Gain was proposed for London on the basis that this would, in most circumstances, result in an appreciable and quantifiable net gain (i.e. codifying the 'measurable biodiversity net gain' required in the NPPF) and because the Department of Environment Food and Rural Affairs (Defra) evidence base and impact assessment, undertaken to test the impact of the policy, indicated that the 10% requirement is unlikely to significantly affect the viability of new development.

4.11. Existing planning policies in the London Plan and Newham Local Plan already provide a framework for ensuring that the most important habitats are protected through designation as SINCs. These policies encourage the delivery of development on existing developed land, or previously developed land, rather than land of nature conservation value. Therefore, most of the sites allocated for development have a relatively low biodiversity baseline because they are predominantly sites with existing buildings and low-quality habitats such as amenity grassland and planted trees and shrubs. Consequently, the 10% BNG requirement will deliver relatively little in the way of increased biodiversity as it is a 10% increase of a low baseline value. Furthermore, on sites with a low baseline value, increasing the BNG requirement (to 15% or 20%) would still result in only small gains.

4.12. In Newham, raising the BNG requirement from at least 10% to 15% or 20% is likely to have limited benefit. This is because the vast majority of development sites in Newham will have a low biodiversity baseline, and a percentage increase of 15% or 20% from a low baseline will result in marginal gains over and above the forthcoming mandatory 10% requirement. Furthermore, for sites with a low biodiversity baseline, the application of the Urban Greening Factor is likely to result in a BNG of over 10% by default, and it is considered that this further weakens the case for seeking an uplift in the percentage.

Regional planning context

London Plan (2021)

4.13. The London Plan is the Spatial Development Strategy for Greater London and sets out a framework for how London will develop over the next 20-25 years and the Mayor of London's vision for Good Growth. The London Plan includes policies for protecting green and water infrastructure across London. It also sets out that Boroughs should prepare a Green Infrastructure Strategy and evidence to inform area-based strategies which identify green infrastructure assets, their function and potential function. This document is considered to fulfil this requirement in the London Plan.

4.14. London Plan Policy G1 Green infrastructure seeks to protect and enhance London's network of green and open spaces and that green infrastructure should be planned, designed and managed in an integrated way to achieve multiple benefits.

4.15. The Mayor of London has also developed a number of related strategies that inform the development of green and water infrastructure policy for Newham.

Urban Greening Factor

4.16. Newham, in common with other London Boroughs, is facing a number of significant social and environmental challenges during the period of the next Local Plan.

4.17. Rapid population growth will bring many opportunities, but it will also lead to increasing and competing pressures on the use of space, not least the balance between providing enough housing and associated infrastructure and protecting and improving Newham's green spaces and natural environment.

4.18. It is widely accepted that the key to achieving this will be finding better ways for neighbourhoods to be more space-efficient through good planning and design. This will mean creating places of higher density in appropriate locations to get more out of limited land, encouraging a mix of land uses, and co-locating different uses to provide communities with a wider range of services and amenities. A fundamental part of this approach is to incorporate green elements into the built environment to provide a range of benefits including enhanced biodiversity, addressing the urban heat island effect, sustainable drainage and amenity – the latter being especially important in the most densely developed parts of the Borough where existing traditional green space is limited.

4.19. London Plan policy requires all major developments to contribute to the greening of London by including urban greening as a fundamental element of site and building design. This requires incorporating measures such as high-quality landscaping (including trees), green roofs, green walls and nature-based sustainable drainage. The Mayor of London has set urban greening targets of 0.4 for predominantly residential developments and 0.3 for predominantly commercial developments.

4.20. The provision of urban greening to meet the required scores is determined by calculating how much urban greening of different types (which are given a different multiplier depending on their function and efficacy) is being delivered and dividing the total area of proposed greening by the area of the site.

4.21. Despite setting target scores, the London Plan policy recognises that London Boroughs may wish to set their own target scores based on their individual needs and challenges. Experience to date suggests that the target scores in the London Plan are achievable but challenging. Consequently, no London Borough has yet set their own target scores. They have adopted the target scores provided in the London Plan.

Forest Lane Park

4.22. Newham faces challenges with respect to population growth and intensification of development whilst also having a deficiency of open space across parts of the Borough. Open space covers 25% of Newham although a significant amount of this space is open water; just 7% of the Borough is accessible green space. This compares unfavourably with neighbouring Boroughs such as Waltham Forest, Redbridge and Barking & Dagenham. Furthermore, the Borough has just 16% tree cover which is the second lowest in London.

4.23. The Mayor of London has produced guidance to boroughs regarding the application of the UGF[11]. The guidance indicates that in order to safeguard the integrity of the approach, it is essential to retain:

- the calculation methodology set out in the Mayor of London guidance
- the surface cover types set out in the London Plan
- the surface cover factor scores set out in London Plan

4.24. However, the guidance also indicates that Boroughs may set higher target scores, but this must be based on evidence relating to the need for green infrastructure and the identification of opportunities to address this need through the planning process. The evidence needs to be of sufficient scope and detail to support bespoke target setting and demonstrate that the delivery of specific benefits through increased green infrastructure would be both ambitious and achievable.

4.25. If evidence of need, opportunity and achievability is provided a Borough could set new targets that apply to the whole Borough or for different locations within a Borough, introduce different targets for different use classes and introduce a target for minor developments.

4.26. There is clearly a need for additional open space in Newham but the UGF is not a 'green space factor' and was not designed to deliver additional open space per se. The UGF guidance issued by the Mayor of London provides some scope for Newham to alter the recommended UGF target scores. However, there would need to be very robust evidence of need, opportunity and achievability to justify an increase in the target scores and evidence that most new development in Newham is easily achieving the London Plan target scores (and that higher scores are justifiable and reasonable as a consequence).

4.27. Although increasing the UGF target scores may not be an option for securing additional greening in Newham at the present time, the guidance states that where an applicant can provide a compelling rationale for not achieving the UGF target score, a Borough could include local policy for securing off-site greening in the immediate vicinity of the site or financial contributions to make up any shortfall.

London Environment Strategy (2018)

4.28. The London Environment Strategy seeks to maximise green infrastructure in order to support the aim of more than half of London being green and for tree canopy cover to be increased by 10 percent.

Mayor's Transport Strategy (2018)

4.29. The Strategy acknowledges that green infrastructure in streets and public realm encourages this necessary behaviour change. It also recognises the key role the transport network has in providing new green infrastructure in London, for example creating opportunities for new street tree planting and implementation of Sustainable Urban Drainage Systems (SuDS).

11 Mayor of London Urban Greening Factor Guidance

London Health Inequalities Strategy (2018)

4.30. The London Health Inequalities Strategy confirms that living in greener places is linked to longer life expectancy and better mental and physical health and that living in greener areas may reduce the impact of low incomes on health. Consequently, it recognises that it is essential that all Londoners have access to good quality green space and a greener public realm.

All London Green Grid (2012)

4.31. The All-London Green Grid Supplementary Planning Guidance (ALGG) aims to promote the design and delivery of 'green infrastructure' across London, for the benefit of people and wildlife. The ALGG includes eleven area frameworks and identifies key projects that will help to improve London's network of green infrastructure. The Lea Valley and Finchley Ridge Framework and the Epping Forest and River Roding Framework propose enhancements to the accessibility and environmental quality of the two river corridors that book-end the London Borough of Newham.

Other regional strategies

4.32. The Mayor of London has also developed a number of other related strategies that inform the development of green and water infrastructure policy for Newham:

- Good Growth by Design (2022)
- Design for the Circular Economy (2020)
- London Plan Guidance, Urban Greening Factor (2023)
- Making London Child Friendly (2020)
- Shaping Neighbourhoods: Play and informal Recreation SPG (2012)
- Public London Charter (2021)
- Epping Forest SAC
- Lee Valley Regional Park Authority's Development Framework (Area 1)
- Lee Valley Regional Park, Landscape Character Assessment and Landscape Strategy, LUC (2019)

Epping Forest Strategic Alternative Natural Green Space (SANG)

4.33. Epping Forest lies to the north-west of the London Borough of Newham, It is designated under the Conservation of Habitats and Species Regulations 2017 (as amended) as a Special Area of Conservation (SAC).

4.34. Research undertaken in 2018 indicated that the special features of the SAC were in decline. This is due, in part, to recreational pressure from visitors who regularly travel up to 6.2 kilometres to visit the site.

4.35. The Government's nature conservation agency, Natural England, produced advice that all residential development within 3km of the SAC and all residential development within 6.2km of the SAC should make a financial contribution to strategic measures to manage these recreational pressures.

4.36. These strategic measures, including increased management of sensitive parts of Epping Forest and the creation of Suitable Alternative Natural Green space (SANG), have the aim of encouraging visitors to use designated areas away from sensitive parts of the Forest and to provide attractive alternative open spaces to reduce the visitor pressure on the habitats of the Epping Forest SAC.

4.37. Parts of the Borough fall within the 6.2km 'zone of influence' and residential development in the Borough is likely to result in an increase in recreational pressure on the Epping Forest SAC. Consequently, through the planning process the Borough is required to assess likely

significant effects of new development within the 6.2km zone of influence and secure suitable mitigation to ensure no adverse effects of new development. Suitable mitigation can be in the form of financial contributions to management of the SAC and/or contributions (physical or financial) to the establishment of SANG. The Borough has agreed to participate in a joint approach to provide financial contributions to manage the SAC.

4.38. There are no hard and fast criteria for SANG across the country, but Natural England has produced 'Guidelines for Creation of Suitable Alternative Natural Green space' drawing on experience and lessons learned for the first SANG which were developed to protect the Thames Basin Heaths SAC.

4.39. SANG can be created from:

- existing open space with no existing public access or limited public access, which could be ecologically improved and made fully accessible to the public; or
- existing open space, which is already accessible, but which could be changed in character so that it is more attractive to the specific group of visitors who might otherwise visit a sensitive site.

4.40. SANG cannot be created on other sites of high nature conservation value which are likely to be damaged by increased visitor numbers.

4.41. Natural England has confirmed that Newham needs to identify a suitable approach to delivering SANGs and that they would be supportive of an approach similar to those being adopted in other London boroughs, which reflect the urban context in which the mitigation is being developed i.e. a borough wide approach to SANG style measures (the toolbox approach).

4.42. SANG can be created from existing open space with no existing public access or limited public access, which could be ecologically improved and made fully accessible to the public; or existing open space, which is already accessible, but which could be changed in character so that it is more attractive to the specific group of visitors who might otherwise visit a sensitive site. SANG cannot be created on other sites of high nature conservation value which are likely to be damaged by increased visitor numbers.

4.43. Parts of Newham already have a deficit of publicly accessible green space which is likely to be exacerbated due to the planned growth in key Wards. Consequently, the potential for many of the Borough's existing accessible open spaces to be improved to provide SANG is limited as they are already well used. Furthermore, they are already fulfilling a number of key functions, including outdoor sports provision which constrains the potential for enhancement of their landscape and ecological value, an essential requirement of the provision of SANG.

4.44. In 2025, an Epping Forest Special Area of Conservation Recreation Mitigation Strategy was completed with the Council and its consultants, LUC, working in partnership with Natural England.

4.45. The Strategy mitigates recreational pressure in Epping Forest SAC and sets out:

- Fully costed of interventions to be delivered in the London Borough of Newham (LBN).
- Newham's SAC Recreation Mitigation tariff

4.46. All new homes built within the Zone of Influence (ZOI) will be required to make a financial contribution to the delivery of these interventions.

4.47. The agreed strategic recreation mitigation projects include:

- Beckton Masterplan site
- Star Park
- The Greenway

Local planning context

Newham Local Plan (2018)

4.48. The Local Plan (2018) sets out a vision and framework for development in the Borough. Alongside the London Plan (2021), it forms the Development Plan for Newham against which individual planning proposals are assessed. The Local Plan (2018) policies that relate to this Strategy are:

- SC4: Biodiversity
- INF6: Green Infrastructure and the Blue Ribbon Network
- INF7: Open Space and Outdoor Recreation

Newham Local Plan review

4.49. All Councils are required to have an up-to-date Local Plan. Newham is undertaking a refresh of the plan and to deliver the Borough's key objectives: inclusive growth, delivering a fairer Newham, and addressing our climate emergency. The G&W Strategy forms part of the evidence that supports the policies and site allocation in the Local Plan.

4.50. The Local Plan and this Strategy also draw on other policies and strategies adopted for green and water spaces across Newham.

Newham Open Spaces Assessment (2010)

4.51. This study surveyed the quality and total area of 190 open spaces across Newham and assessed green space provision against the Borough's population. This has been superseded by the survey work carried out to develop this Strategy.

Playing Pitch Strategy (2017)

4.52. This Strategy plans for the provision of formal sports facilities across Newham. Note that this work is being updated to inform the new Local Plan. A revised Playing Pitch Strategy was completed in 2024.

Newham Sites of Importance for Nature Conservation Review (2022)

4.53. A review of Newham's Sites of Importance for Nature Conservation (SINC) was carried out in the summer of 2022. This consisted of a desktop assessment of the SINC sites identified in the current Local Plan and an assessment of sites that could be added to Newham's inventory of SINCs. The desktop assessment was followed up by a field assessment of SINCs with public access. A revised list of SINCs was issued as a recommendation as part of the Regulation 18 process. This included:

- Existing SINCs where no changes are proposed
- Existing SINCs where boundary changes are proposed
- Proposed SINCs to be added to the list of SINCs designated by Newham
- SINCs designated in the 2018 Local Plan that should be de-designated

4.54. An updated SINC review was completed in 2025 to reflect comments received as part of the Regulation 19 Local Plan consultation.

MOL Review (2024)

4.55. Green Belt and Metropolitan Open Land (MOL) are the two highest levels of protection that can be given to green space land within Newham.

4.56. A review of MOL designations was undertaken to ensure that designations reflect the NPPF and London Plan policy and Newham's strategic requirements for green infrastructure. The review presented the following:

- Recommendations for sites that should be designated as MOL
- Recommendations for amendments to MOL boundaries to present designated sites as more coherent parcels of land that can support the functions associated with MOL.

4.57. Newham's MOL Review 2024 was published as part of the Local Plan Regulation 19 consultation. An updated MOL review was completed in 2025.

Council strategies

4.58. The emerging Local Plan is aligned with the following Council strategies:

Building a Fairer Newham: Corporate Plan (2022 - 2026)

4.59. Newham's Corporate Plan sets out eight priorities, of which the following are of relevance to this Strategy:

- Priority 1: A healthier Newham and ageing well
- Priority 3: Your neighbourhood
- Priority 4: Safer Newham
- Priority 6: Supporting our young people
- Priority 7: People powered Newham and widening participation
- Priority 8: A campaigning Council

Building Newham's Creative Future (2022)

4.60. An ambitious 15 year plan that demonstrates how the creative and cultural industries contribute to Newham's community wealth building agenda. It includes and action for cultural programming in green spaces.

Climate Emergency Action Plan (2020)

4.61. The Climate Emergency Action Plan details how the Borough will address the challenges of the climate change and biodiversity emergencies, including policies for parks and open spaces and street tree planting.

Just Transition Plan

4.62. In 2019, Newham Council declared a climate emergency. The Council released its first Climate Emergency Action Plan in 2020 outlining key environmental measures and targets. However, the existing plan primarily focused on ways to reduce carbon emissions. This left a big gap in addressing the full scope of interconnected challenges that Newham and its residents face. Therefore, a new plan was needed to target intersectionality by shifting away from a 'carbon emission tunnel vision' and looking at climate action from a broader lens for a just transition to net zero. The plan presents:

- Three principles – guiding beliefs to inform actions
- Six futures – focus areas to deliver ambitious and equitable benefits that are specific to our borough's needs
- Five enablers – methods to ensure transparency and efficient delivery on our principles

Tackling Racism, Inequality and Disproportionality (TRID) (2020)

4.63. The Tackling Racism Strategy sets out four pillars and a series of pledges from the Council on how it will work to make Newham a fairer, better place, where all residents – regardless of whether they are Black, minority ethnic or from disadvantaged groups – are safe, get the best possible start in life and have the same life chances.

Social Integration Strategy (2021)

4.64. The Social Integration Strategy includes steps to ensure that Newham is a fair and socially inclusive Borough.

Health and Wellbeing Strategy, 50 Steps to a Healthier Newham (2024)

4.65. The 50 Steps Strategy sets out 50 steps to improve physical and mental health in Newham from 2024 to 2027. The Strategy focuses on the social determinants of health and improving health inequalities, both within Newham and between Newham and other Boroughs in London.

Greening the Borough – The Citizen's Assembly(2021)

4.66. Newham's Citizen Assemblies are the largest participatory budgeting exercise in the UK to date. The Borough's first permanent, or standing Citizen Assembly took place in July 2021 and focused on 'Greening the Borough: Parks & Green Spaces' and produced seven recommendations for improving the quality of Newham's green spaces.

Youth Safety Board Strategy

4.67. Youth Safety Board Strategy aims to help young people to feel safe in physical and social spaces (including public places).

Children and Young People's Charter (2022-27)

4.68. The Children and Young People's Charter proposes measures to create well-lit and freely accessible public spaces.

The Local Implementation Plan (2019)

4.69. The Local Implementation Plan focuses on the delivery of the Mayor of London's Transport Strategy and the long-term transport objectives for Newham until 2041.

Air Quality Action Plan (2014-24)

4.70. This plan contains 25 key action areas across all council service areas to mitigate and improve poor air quality including the promotion of walking and cycling and planning that is aligned with 'Air Quality Positive' and 'Healthy Streets' approaches.

Local Flood Risk Strategy (2022)

4.71. The Local Flood Risk Strategy outlines the challenges and responses to managing flooding from these sources. Newham Council as lead local flood authority operates as a statutory consultee to the Local Planning Authority and reviews all major applications to ensure that proposals address the requirements of safety, resilience and reduction of local flood risk.

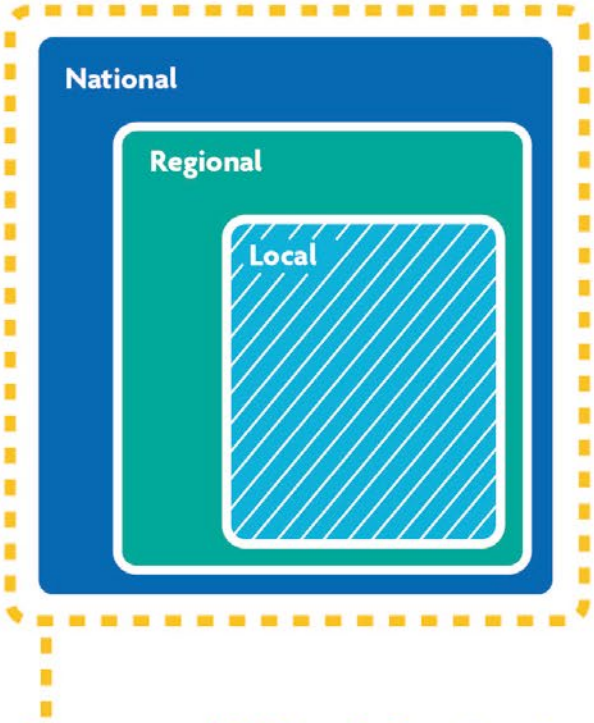
Sustainable Drainage Design and Evaluation Guide (2020)

4.72. The Sustainable Drainage Design and Evaluation Guide outlines objectives and a design checklist to ensure that Sustainable Urban Drainage (SuDs) principles are embedded in each stage of the design of buildings, streets and public spaces.

Organisational context

4.73. The G&W Strategy influences policy and best practice in other parts of the Council, as illustrated in Figure 4.1 below. As an example, the G&W Strategy considers how green space can be adapted to encourage active travel (walking and cycling), while the Council's Local Implementation Plan and Cycling Strategy consider how parks and green spaces can support walking and wheeled transport planning objectives. The G&W Strategy will encourage cross-departmental working and a coordination of resources that can achieve a broader set of outcomes for people living and working in the Borough than would be achieved by working in isolation.

4.74. The achievement of the objectives for green and water infrastructure set out in the Action Plan which accompanies this Strategy will depend on this cross-departmental collaboration. To thrive we must draw on the natural world and work as an ecosystem – council departments, community groups, charitable organisations, developers, residents and the business community must work together to achieve the successful delivery of this G&W Strategy.



Green and Water Infrastructure Strategy

National

- NPPF (2023)
- 25-Year Environment Plan
- 2021 Environment Act
- Natural England Green Infrastructure Framework (2023)

Regional

- London Plan (2021)
- London Environment Strategy (2018)
- Mayor's Transport Strategy (2022)
- London's Health Inequalities Strategy (2018)
- Thames Estuary 2100 Plan (2012)
- All London Green Grid (2015)
- The Lee Valley Regional Park Authority's Development Framework (Area 1)

Local

- Newham Local Plan
- Newham Corporate Plan (2022-26)
- 50 Steps Health a Wellbeing Strategy (2024-27)
- Climate Emergency Action Plan (2020)
- Newham Just Transition Plan (2023)
- Air Quality Action Plan (2019)
- Local Implementation Plan
- Citizens' Assembly Greening the Borough Action Plan (2021)
- Newham SINC Review (2022)
- Newham Characterisation Strategy (2024)
- Newham Metropolitan Land Review 2024
- Newham Playing Pitch Strategy (2024)
- Newham Community Facility Needs Assessment (2022)
- Newham Sustainable Drainage Design and Evaluation Guide (2020)

Figure 4.1: Newham Green and Water Infrastructure Strategy policy contexts

Physical context

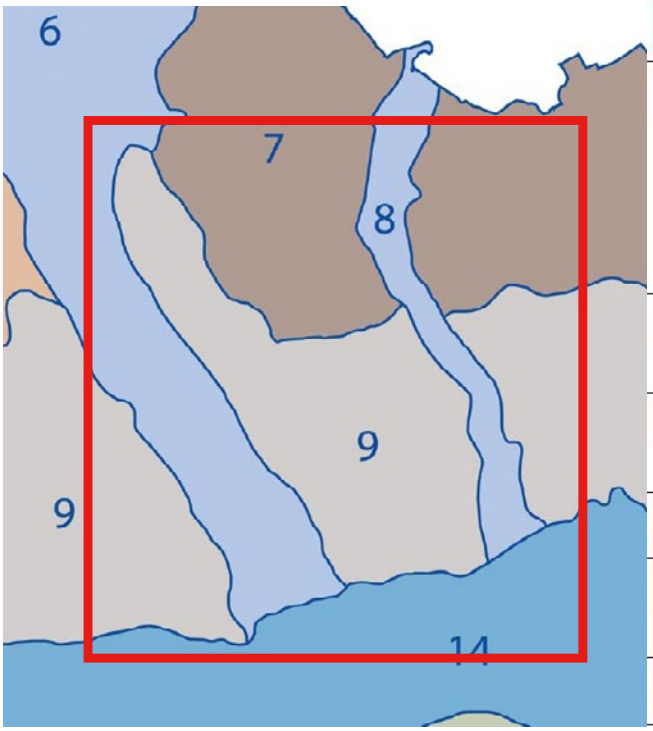
4.75. Newham's landscape is relatively flat, rising gently from the River Thames in the south and the River Lea in the east to a height of around 15 metres at the north of the Borough on Wanstead Flats. The lowest parts of the Borough are in the south-east with ground elevations as low as 0.8m AOD, as well as in Plaistow, Canning Town, Custom House, Silver Town, North Woolwich, North Beckton and Beckton, where ground elevations are typically no more than 2m AOD. The Borough is bisected by artificial landforms corresponding to railways and other infrastructures such as the Greenway.

4.76. The River Lea forms the Borough's Western boundary and the River Roding forms the eastern boundary with the London Boroughs of Barking and Dagenham and Redbridge. The River Thames forms the southern boundary.

4.77. The London Borough of Newham covers an area of approximately 38.6 km^2, a significant portion of which is at a high risk of flooding[12]. However, the Thames Barrier protects Newham from flooding by tidal surges on both the Thames and Lea. The Barking Creek Barrier protects the River Roding. In the south of the Borough, the Royal Docks collectively form the largest enclosed docks in the world.

4.78. Historically, farming was the significant land use across Newham until the mid-19th century. Although some industries emerged along the River Lea between the 18th and 19th centuries, significant changes within the Borough did not occur until the Royal Docks were constructed in the 1850s. The railway links to the Royal Docks encouraged other industries to the area, and Newham grew to be one of the most important manufacturing centres in southern England. As industries declined, and after the devastation of the World War II bombing of the Borough, many new council houses were constructed, and the population became increasingly diverse as new immigrants were recruited to help with post-War reconstruction. Significant land contamination issues from former industrial and landfill uses are found across the Borough.

Figure 4.2: Natural landscape areas map



Landscape Types	Natural Landscape Areas (see opposite)	
Thames Floodplain	13	Upper Thames
	14	Lower Thames Floodplain
Tributary Valleys	1	Colne River Valley
	6	Lea River Valley
	8	Roding River Valley
	11	Brent River Valley
	16	Wandle River Valley
	18	Ravensbourne River Valley
	20	Cray River Valley
Gravel Terraces	9	North Thames Terraces
	10	Hayes Gravels
	12	Hounslow Gravels
Clay Plateaux	2	Ruislip Plateau
	3	Barnet Plateau
	7	Essex Plateau
Clay Ridges	4	Finchley Ridge
	5	Hampstead Ridge
High Heaths and Commons	15	South Thames Heaths and Commons
	17	South London Clays and Gravels
	19	South London Pebbly Sands
Chalk Dip Slope	21	Lower North Downs Dip Slope
	22	Upper North Downs Dip Slope

12 SFRA, 2017

4.79. Newham has considerable water infrastructure assets because of its position on the Thames and between the river's two northern tributaries (the Lea and the Roding) and the significant area of the Borough taken up by the Royal Docks. Each of these four water areas has a distinct visual character and function.

4.80. Newham's water spaces are significant components in the Borough's inventory of natural capital assets and provide vital ecosystem services in respect of climate change mitigation and biodiversity connectivity and make a significant contribution to health as active and passive recreational spaces. As elsewhere in London, water body frontages are major value drivers in the regeneration context. A balance needs to be struck between these different aspects of water body management and development.

Geology and hydrology

4.81. Newham's bedrock (see Figure 4.3) consists mostly of London Clay and Lambeth group layers, with low to moderate permeability. In the south of the Borough are formations of Thanet Sand and White Chalk which are associated with high to very high permeability. Superficial deposits are dominated by free draining river terrace deposits in the centre and north of the Borough. Alluvium dominates the Borough's southern, eastern and western boundaries.

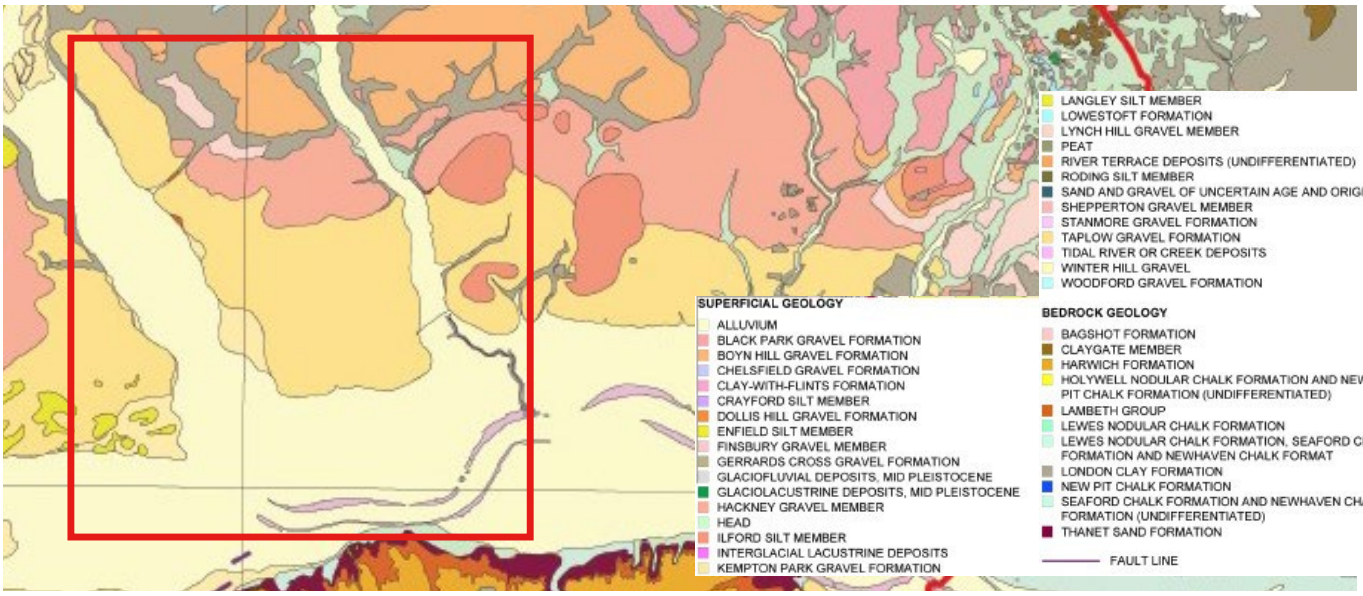
4.82. There is a high degree of variability in the water table across space and time, dictated by local topography, hydrology and seasonal weather conditions. In most locations the water table is less than three meters deep.

4.83. The majority of the Borough is densely developed with a predominantly impermeable urban fabric which creates conditions for flash flooding and water ponding in low lying areas. Newham has the lowest sewer capacity of all 33 Boroughs, and it is predicted to be over capacity within 20-30 years. More than half of Newham's sewer capacity consists of a historical combined sewer system which provides low capacity and makes the Borough prone to surface water flooding[13].

London's Natural Signatures

4.84. Natural England's classification of London's landscape types and natural landscape areas describes Newham as being defined by the Lower Thames Flood plain to the south and the Lea and Roding River Valleys

Figure 4.3: Bedrock and superficial geology map



13 SuDS Design Guidance, 2020

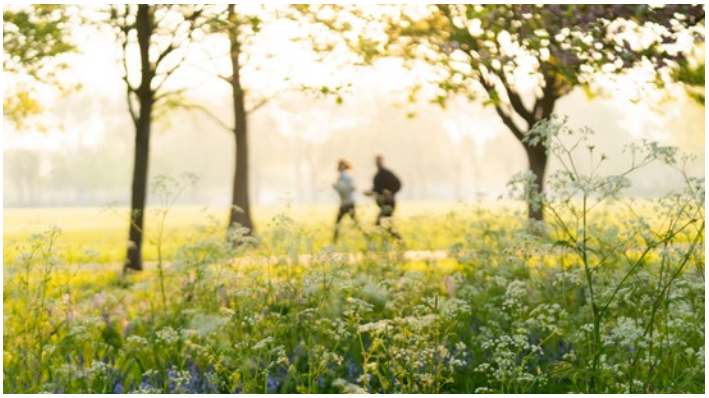
to the west and east respectively. Between these two valleys, Newham occupies and is part of the North Thames Terrace that extends from Rainham in the east to the City of London in the west. The section of the Terraces in Newham has been intensively used for agriculture and gravel extraction, but its historic character has been more in support of the City of London with a network of settlements, such as Stratford, Ilford and Romford on the main road to East Anglia.

Socio-economic context

4.85. Urban green and water spaces are a fundamental characteristic of all successful cities and Newham (as part of London) has a mosaic of spaces that form an integral part of its urban form.

4.86. Green and water spaces provide opportunities for physical activity, social interaction and a space for psychological restoration. As the COVID-19 pandemic demonstrates, people from all walks of life value access to nature but not everyone is able to benefit from this access to the same extent. A 2019 study by Groundwork UK established that there is a strong correlation between socio-economic status and access to good quality green space. The report found that:

- People from low income households or areas, people from ethnic minority backgrounds and disabled people are among the groups that do not currently enjoy access to good quality green space
- The COVID-19 pandemic has made these inequalities more pronounced
- Deficiency of parks and green spaces is one of the reasons, but people also experience complex barriers when it comes to accessibility, relevance and feeling safe[14]



Central Park - Newham

4.87. Access to open space to enable regular physical activity has significant health benefits, contributing to the prevention and management of diseases such as diabetes, mental health problems, cardiovascular disease and cancer. Other benefits include improving sleep, maintaining healthy weight, managing stress and improving quality of life[15].

4.88. There is also a strong correlation between deprivation, poverty and both life expectancy and the number of years someone lives in good health.

4.89. Newham faces a number of significant issues in this context:

- Newham is the third most deprived local authority in London: three out of every four residents live in the 30% most deprived neighbourhoods in the country[16]
- The projected increase in the population of the Borough between 2023 and 2038 will significantly increase the level of demand for existing green space. There is limited potential to add additional green space over this period due to the already developed nature of the Borough
- Newham has significant levels of deficiency in green space relative to other Boroughs

4.90. In most instances, Newham has worse or similar health outcomes associated with physical activity compared to London and England averages.

14 https://www.groundwork.org.uk/about-groundwork/reports/outofbounds/
15 UK Chief Medical Officers' Physical Activity Guidelines 2019
16 ons.gov.uk

Healthy life expectancy

4.91. A girl born in Newham today can expect to live in good health (healthy life expectancy) until age 64.6 years. This is similar to healthy life expectancy for females across London (65) and England (63.9).

4.92. A boy born in Newham today has a healthy life expectancy of 59.5 years. This is the second lowest of all London Boroughs and lower than the London (63.8) and England (63.1) averages. (see Table 4.2)

Overweight and obesity

4.93. In 2021/22 almost half of Newham adults (47.3%) were estimated to be overweight or obese. This was better than London (55.9%) and England (63.8%) averages, although in previous years Newham had similar or worse levels of adult overweight and obesity and the trend is unclear. (see Table 4.3)

4.94. In 2022/23 just over one in five reception children (22.0%) and almost half of year six children (45.5%) in Newham were estimated to be overweight or obese. Newham has the highest level of year six overweight/obesity in London, higher than London (38.8%) and England (36.6%) averages. Overweight / obesity among Newham year six children is decreasing. (see Table 4.4)

Long-term health conditions

4.95. In 2022/23, 8.7% of people aged 17+ registered with a GP in Newham had a diagnosis of diabetes. This was the sixth highest level of the London Boroughs.

4.96. The same year, 7.0% of people aged 18+ registered with a GP in Newham had a diagnosis of depression, which was lower than the London and England averages and the third lowest of the London Boroughs. However levels of depression are increasing in Newham and London.

Table 4.2: Newham - Male & Female Healthy Life Expectancy at Birth (2018-2020): Newham, London, & England

	Newham (years)	London (years)	England (years)
Healthy life expectancy: male	59.5	63.8	63.1
Healthy life expectancy: female	64.6	65	63.9

Table 4.3: Newham - Male & Female Healthy Life Expectancy at Birth (2018-2020): Newham, London, & England

	Newham	London	England
Prevalence of adult overweight and obesity	47.3%	55.9%	63.8%

Table 4.4: Child overweight (including obesity) prevalence, 2022/2023: Newham, London, & England

	Newham	London	England
Prevalence of overweight and obesity: reception	22.0%	20.0%	21.3%
Prevalence of overweight and obesity: year 6	45.5%	38.8%	36.6%

4.97. In 2021, the rate of premature mortality (under 75 years) from cardiovascular disease considered preventable was similar to London and England averages, at 36.1 per 100,000 population. In 2020-22 premature mortality from cancer considered preventable was similar to England but higher than the London average, at 50.8 per 100,000. (see Table 4.5)

Population change

4.98. The projected increase in the population of the Borough between 2023 and 2038 will significantly increase the level of demand for green space. Very little additional new green space will be provided over this period.

4.99. The population of Newham will increase by just over 25% between 2023 and 2038 (from 364,878 to 456,462).

4.100. Population by decile (the age decade to which residents belong) will remain relatively stable across the same period. There will be fewer people under 20 living in the Borough by 2038 but more people in the 61-80 age bracket[17].

4.101. As Table 4.6 shows, growth will be concentrated in five Wards that will experience population increase that are multiples of the average growth.

4.102. By contrast, populations will decrease in 10 Wards over the same period.

4.103. As noted in Section 3, the extent to which green and water spaces can be enjoyed by resident populations is also influenced by cultural heritage. Newham has an extremely diverse population. 48% of the population of Newham is made up of four specific ethnicities (Indian, Bangladeshi, Pakistani, Black African).

4.104. Population structure is not projected to change significantly between 2023 and 2038. Amongst the major population segments, the percentage of residents identified as 'white British' ethnicity will decrease slightly while the segments identified as 'Other white', 'Indian', 'Bangladeshi' and 'Black African' ethnicities will all increase slightly.

Table 4.6: Newham - major growth Wards 2023-38: average growth 25.09% Ward

Ward	Population 2023	Population 2038	Percentage increase
Beckton	18,280	37,651	105.97
Stratford and New Town	44,704	80,788	80.72
Royal Docks	20,704	34,712	67.66
Canning Town North	19,664	30,657	55.9
Canning Town South	23,329	31,880	36.65

Table 4.5: Long-term conditions and mortality, 2023: Newham, London, & England

	Newham	London	England
Diabetes prevalence (QOF)	8.7%	6.9%	7.5%
Depression prevalence (QOF)	7.0%	9.5%	13.2%
Under 75 mortality rate from cardiovascular disease considered preventable	36.1 per 100,000	29.5 per 100,000	30.2 per 100,000
Under 75 mortality rate from cancer considered preventable	50.8 per 100,000	44.2 per 100,000	50.2 per 100,000

17 London Data Store: https://apps.london.gov.uk/population-projections/

4.105. This report assesses the level of provision of publicly accessible green space across Newham to Ward level, using 2020-based population projections developed by GLA City Intelligence for Newham's pre-2022 Ward boundaries. Newham updated its Ward boundaries in 2022 but demographic data is not currently available for these revised Ward boundaries. As a consequence, provision calculations are not possible for the new Ward boundaries. Calculations can be repeated when demographic data becomes available.

East Ham - High Street

Table 4.7: Newham population by ethnicity - 2023

Ethnicity	%'age
White British	13.00
White Irish	0.79
Other white	13.99
White and Black Caribbean	1.11
White and Black African	1.10
White and Asian	1.17
Other mixed	1.71
Indian	14.77
Pakistani	9.66
Bangladeshi	12.38
Chinese	1.70
Other Asian	6.66
Black African	11.13
Black Caribbean	3.97
Other Black	2.63
Arab	1.33
Other ethnic group	2.91

Table 4.8: Newham population by ethnicity - 2038

Ethnicity	%'age
White British	11.93
White Irish	0.76
Other white	14.15
White and Black Caribbean	1.08
White and Black African	1.12
White and Asian	1.24
Other mixed	1.89
Indian	14.82
Pakistani	9.08
Bangladeshi	12.80
Chinese	1.85
Other Asian	6.77
Black African	11.25
Black Caribbean	3.64
Other Black	2.78
Arab	1.47
Other ethnic group	3.38

Table 4.9

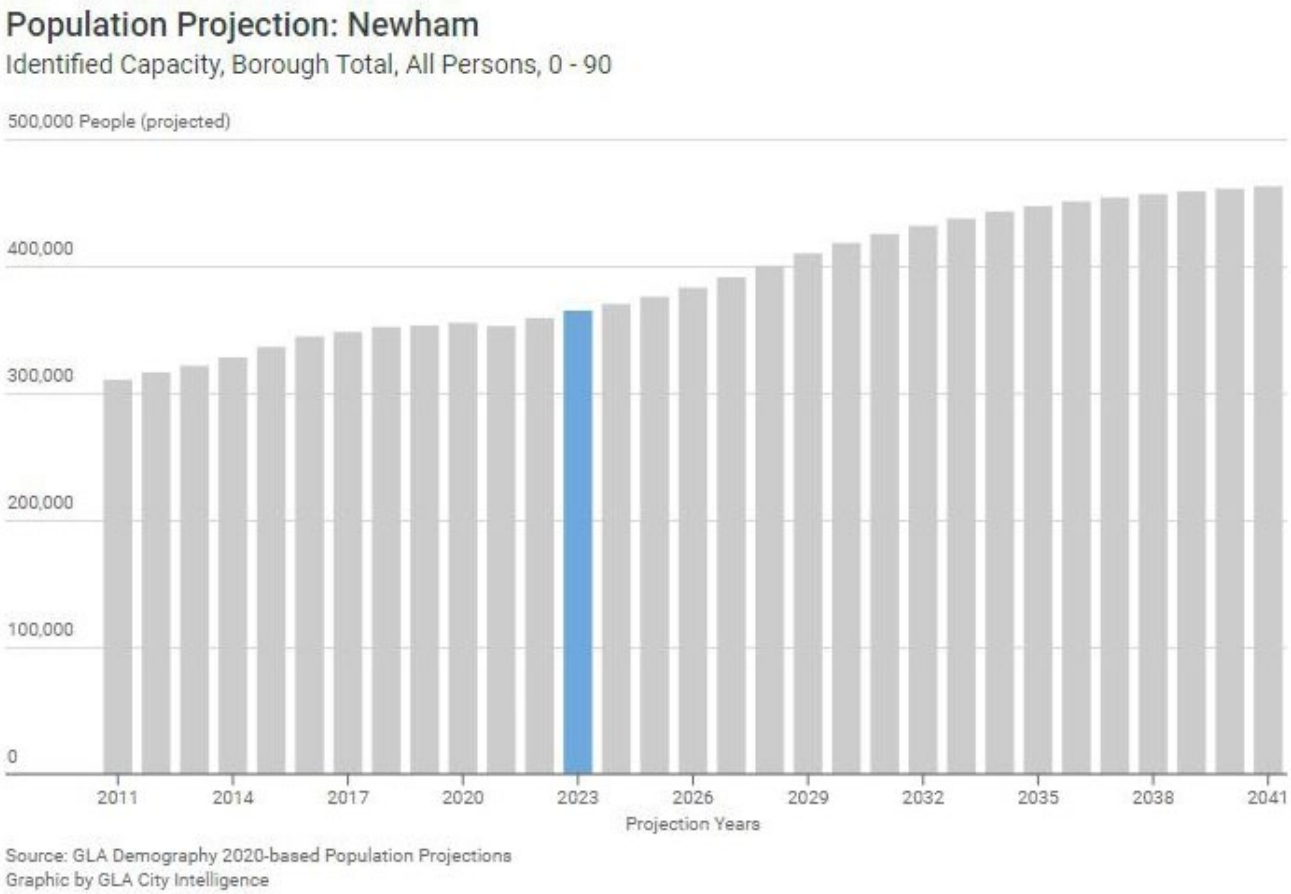


Table 4.10

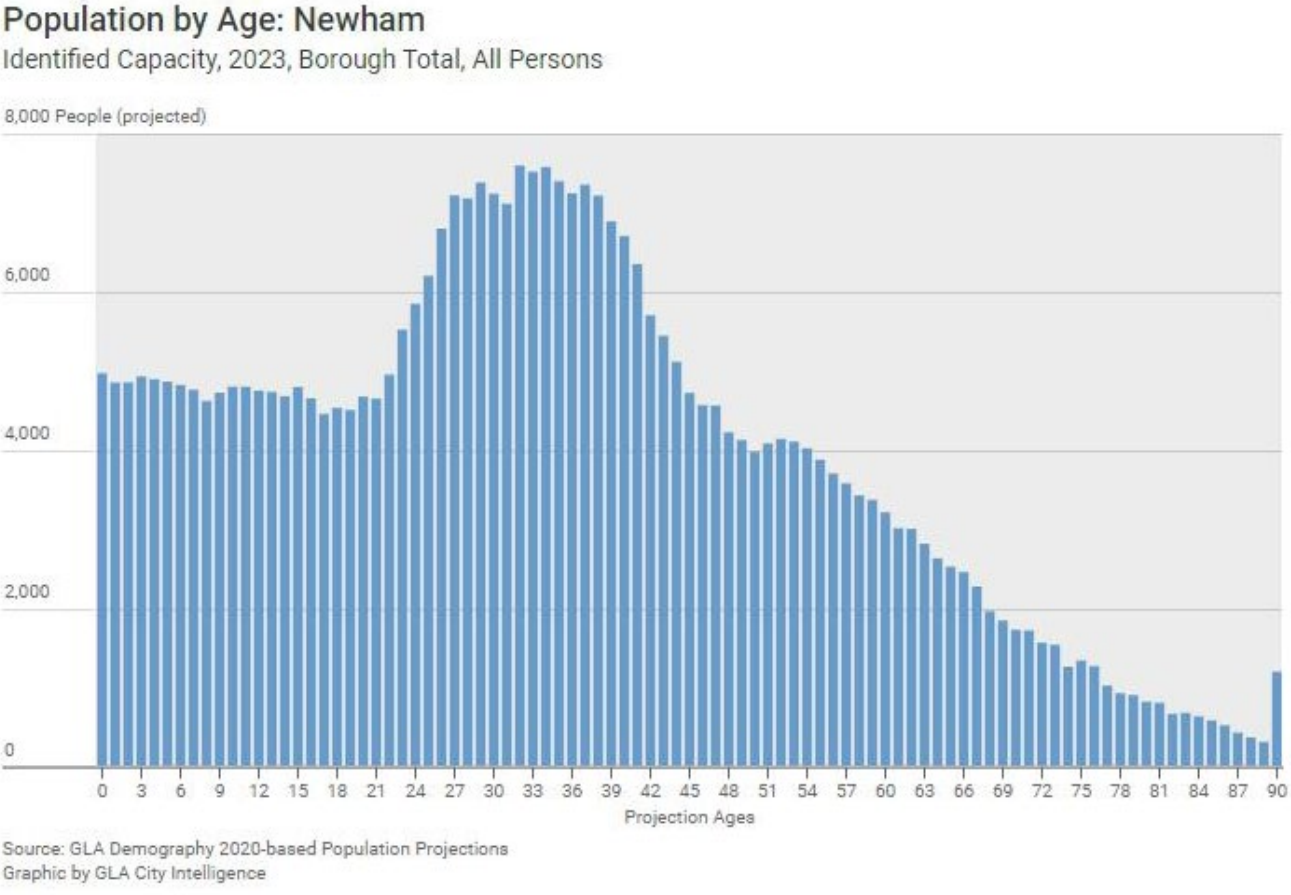


Table 4.11

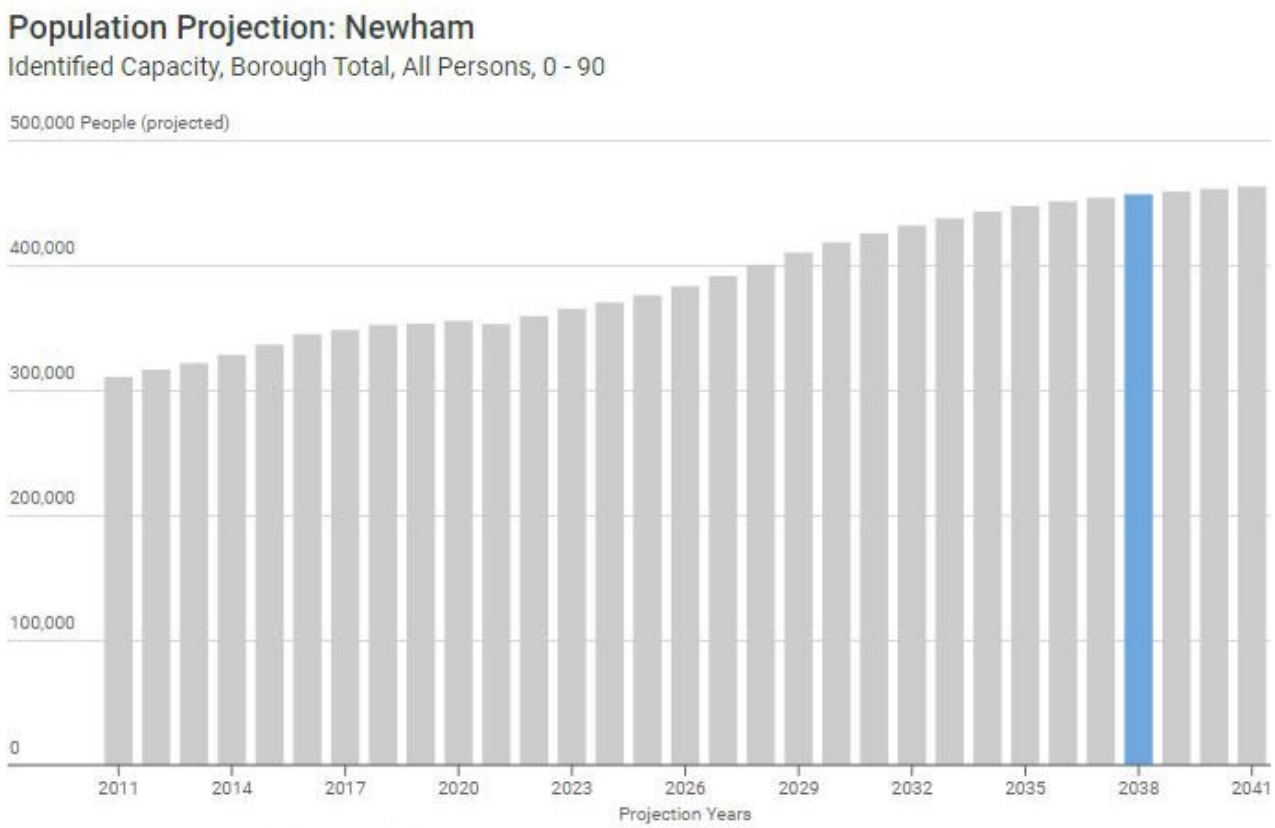
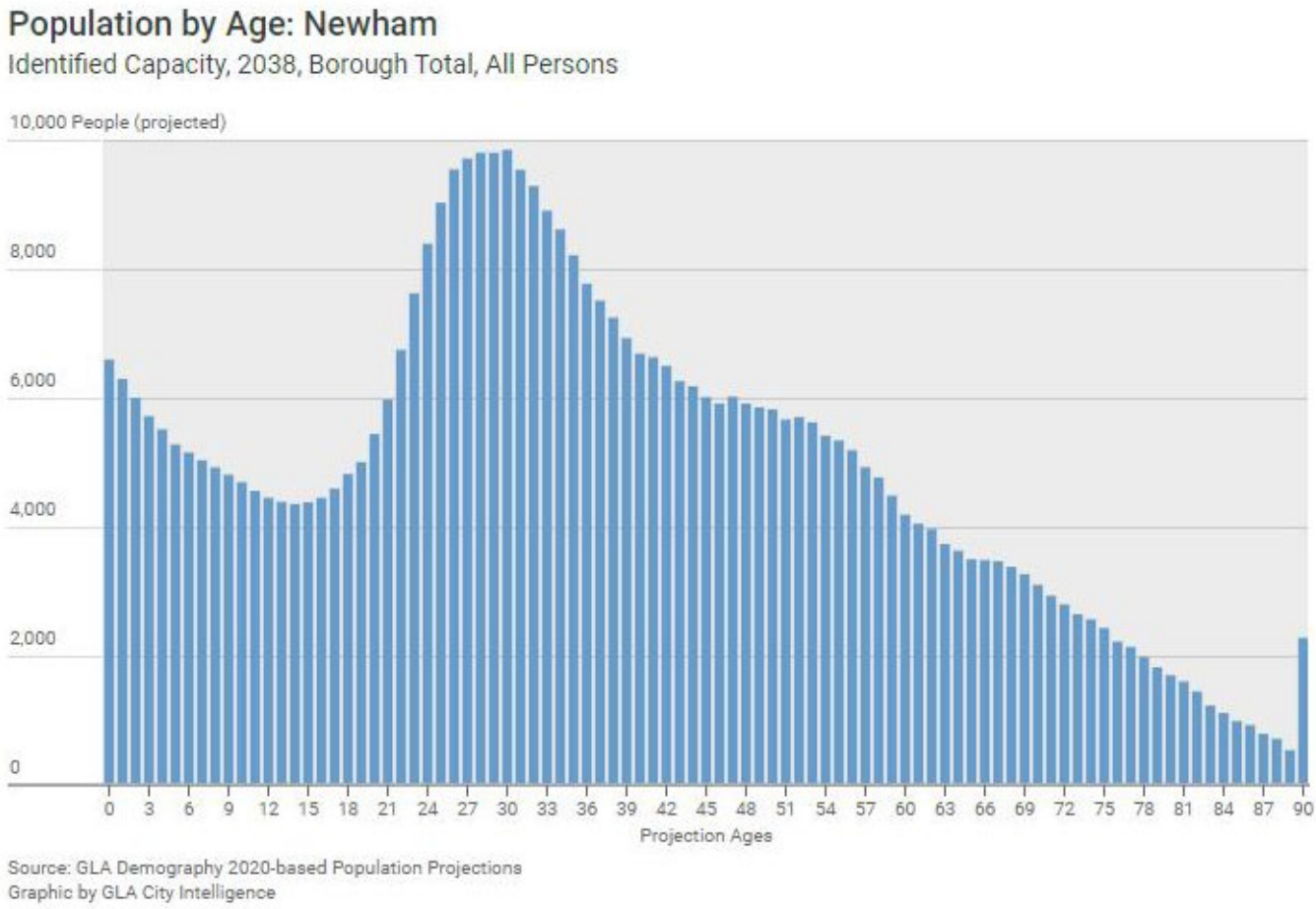


Table 4.12



Deprivation

4.106. There is a strong correlation between access to good quality green and water spaces and levels of deprivation. An understanding of the overall level of deprivation and its geographical distribution across Newham is relevant to the development of the proposals in this Strategy.

4.107. The assessment of indices of deprivation has changed over the past decade. Following the 2011 Census, households were assessed using four dimensions of deprivation: employment, education, health & disability, and housing. Households were classified as being deprived in none, or one, two, three or four of these dimensions (in any combination).

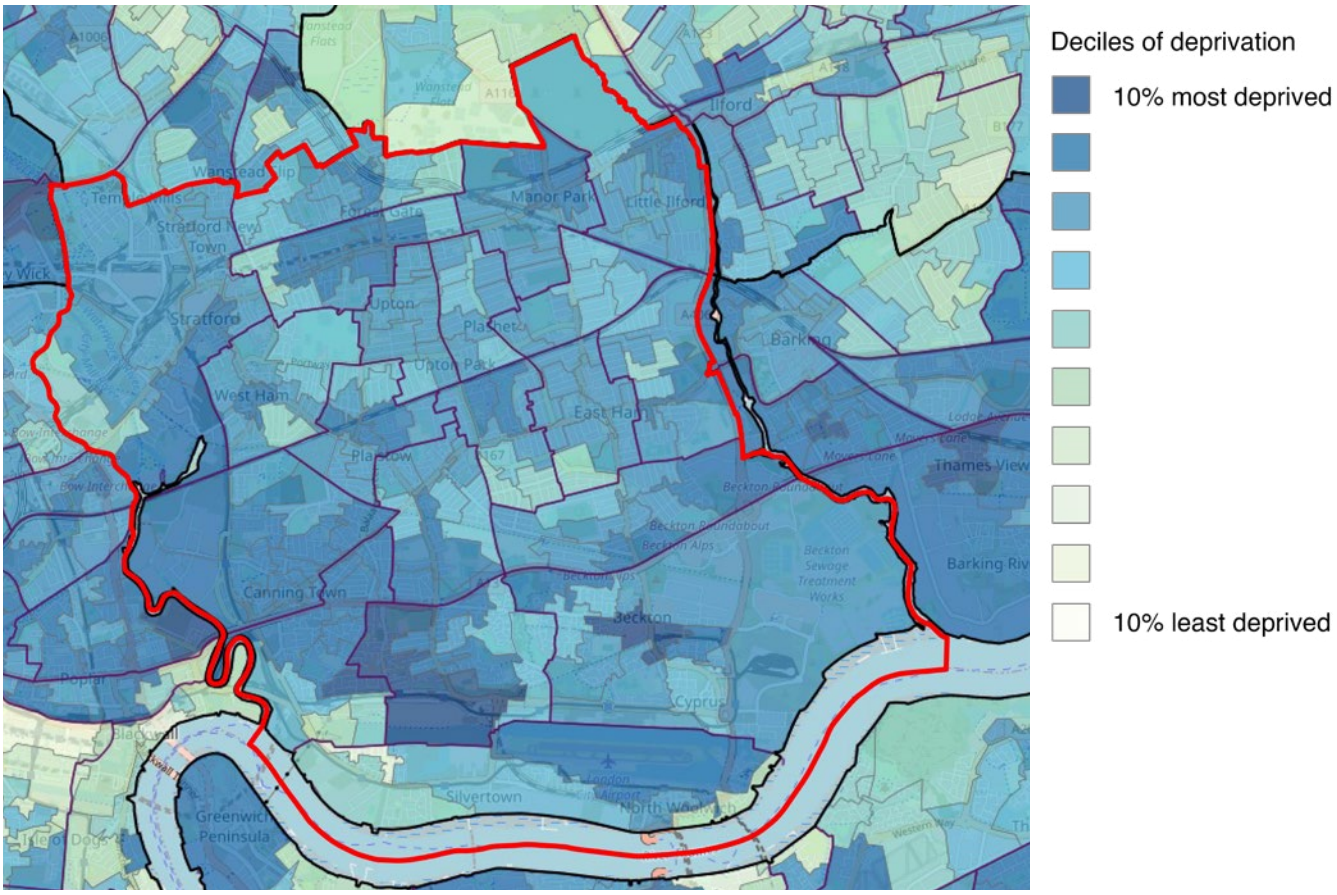
4.108. Using this measure, in 2011 Newham ranked 1st of any local authority in England and Wales in having the lowest proportion of households in England and Wales that were not deprived in any of the four dimensions. The Borough ranked 3rd in its percentage of households deprived in one dimension, 10th in two dimensions, 5th in three dimension and 8th in all four dimensions.

4.109. Since 2015, four main Indices of Multiple Deprivation (IMD) measures have been used to rank the relative deprivation of local authority areas: average rank, average score, proportion of lower-layer super output areas (LSOAs) in the most deprived 10% nationally, and extent.

4.110. Only four LSOA's in Newham are in the 10% most deprived neighbourhoods but over 70% of Newham's LSOA's overall are in the lowest three deciles. Only one of Newham's 164 Lower Super Output Areas is in the top four deciles of least deprived neighbourhoods and only three LSOA's are in the top half of least deprived LSOA's in England.

4.111. The most deprived areas of Newham run in a band across the centre of the Borough from Beckton in the south to Forest Gate in the north.

Figure 4.4: Deprivation across Newham



Source https://dclgapps.communities.gov.uk/imd/iod_index.html

4.112. Although Newham is still a relatively deprived Borough, a comparison of 2015 and 2019 assessments demonstrates that under every IMD measure, Newham is becoming less deprived.

4.113. However, IMD rankings are relative measures, which do not preclude the possibility that Newham may have become more deprived overall despite becoming less deprived by comparison with other local authority areas.

Local green and water space case studies

4.114. Newham Council, residents and community groups and organisations working in Newham are already undertaking steps to improve its green and water spaces. A few of these initiatives have been highlighted below. The G&W Strategy will draw from and build on this success.

4.115. 'People Powered Places' is the London Borough of Newham's flagship programme of participatory budgeting and is a beacon of best practice in participatory democracy.

4.116. Since its launch, the programme has become one of the largest participatory budgeting initiatives in the UK and delivered lasting transformation with more than 200 projects funded that have had real impact on the Borough.

4.117. Between 2021 and 2023, £1.6 million of Neighbourhood Community Infrastructure Levy (CIL) funding was allocated to the programme. Through two annual cycles, these funds were allocated to a total of 157 projects that were voted on by Newham residents through the participatory budgeting process. The projects that were successful each addressed a local priority. There were 24 local priorities co-produced by residents across all eight Community Neighbourhoods. A significant proportion of this funding was allocated to 'greening' projects across the Borough, some of which are new initiatives being proposed by existing organisations while some are new initiatives proposed by community groups or individual residents. In most cases, these initiatives are focused on improving areas of the public realm and 'meanwhile spaces' (spaces that are currently unused but that will eventually be developed).

4.118. The map (right) prepared by a member of the Newham Community Gardens group illustrates the extent of community gardens and meanwhile spaces across the Borough, but this does not fully represent the extent of greening projects across Newham.

Case study 1: Manor Park Community Garden

(Manor Park and Little Ilford Neighbourhood, Draft Local Plan)

4.119. This community garden was established by local residents initially in 2012 and then re-established in 2020 when the lease expired and a new group saw an opportunity to reinvigorate the space for the wider community. The site is a small plot located close to Manor Park's Elizabeth Line Station, on what used to be an old garage. Through the Community Assemblies process, a design for the new garden was created by a group of local residents to transform the mostly hard-landscaped site into a garden that would engage Manor Park's diverse community focusing mainly on edible plants (e.g. aubergine can be easily grown and is a staple vegetable in South Asian cooking). The design process was based on community feedback and consultation.

4.120. The funding enabled the space to be designed "from scratch" with seating areas surrounded by large raised beds. There is a large greenhouse for propagating and composting beds. It is wheelchair accessible and a covered pergola provides sheltered comfortable seating for people. Still in the early days of establishment, the garden has been valuable at bringing people together, sharing ideas and hosting events in collaboration with other local groups and organisations. Highlights to date include:

4.121. Regular activities:

- 150 individuals signed up to weekly newsletter
- Community playgroup
- Garden hosted on Saturday for volunteering
- Active friends of group made up of local volunteers
- Garden open weekdays between 10-4pm

4.122. Collaboration /Events:

- CRUSE Bereavement Pilot Project and community support
- Flourish workshops on gardening skills
- Co-design energy workshop with Repowering London/UCL/Kings College
- Open days with children's activities linked to Manor Park Library
- Healthy eating workshop linked to the library, NHS and Bonny Down Trust
- Supported a local Councillor to run Politics Summer School aimed at children focusing on nature and climate change

4.123. Publicity and Awards:

- Two articles in Newham Voices
- One article in the National Newspaper - The Guardian
- London in Bloom "establishing" award

4.124. Future initiatives:

- Support Newham Council manage the new street beds along Manor Park road
- Collaboration between other community gardens, NHS, One Newham
- Connecting with more plant growers to share plants/skills

4.125. Work with local schools to enable children without a garden to grow and understand plants and nature.

Figure 4.5: Hidden gems map

1 Abbey Gardens
2 Bonny Downs Community Association
3 Cody Dock
4 Dorset Road Community Garden
5 Forest Gate Community Garden
6 Friends of West Ham Park & Community Garden
7 Manor Park Community Garden
8 Plashet Park Nature Trail
10 Stratford Park Sensory Garden
11 The Up Garden
12 Urban Wilderness Community Garden
13 West Ham Memorial Garden
14 Wild Green E13
15 Gardening Thymes
16 Friends of Hermit Road Recreation Ground
17 The Lighthouse and Gardens
18 Long Wall Ecology Garden
19 Newham Green Gym
20 Rainbow Community Garden
21 Sunderland Gardens
22 View Tube Garden
23 E6 Community Allotments
24 The River Roding Trust
25 Sunflower Gardening Group (in West Ham Cemetery)
26 Cobham Residents Community Project
27 Parkside Gardening Project
28 William Paton Community Garden

Manor Park Community Garden

Case study 2: St John's Green Enhancement Pilot

(North Woolwich Neighbourhood, Draft Local Plan)

4.126. This was a project run by muf, Create and RDLAC, testing the community-led regeneration of St John's Green in North Woolwich. As well as creating new places for gathering, play, outdoor cooking and biodiversity, the production of the projects offered meaningful up-skilling for young people in the area through a design and making programme.

4.127. A series of workshops with various groups from North Woolwich helped to develop an approach to enhancing the park. A community biodiversity audit underpinned the brief for re-wilding areas, while a group of under 16s designed and constructed permanent public seating areas.

4.128. Project activities included:

- A biodiversity audit: a 30-day community led audit of St John's Green focused on increasing biodiversity through the creation of a 'wild bank'
- Earth Day: a community event at which the community was asked how the Green could be improved
- Furniture design workshop: an experimental workshop at which participants experimented with different materials and techniques to build new park furniture

4.129. Future initiatives include Grass Routes - an ambitious plan to renovate a corridor of green and open spaces to deliver multi-generational play spaces that address the climate emergency. Social and environmental goals to be achieved by 2024 include:

- 30 residents per site involved in a co-client process
- 1,500 participants/visitors to events and activities across all sites
- Renovate and improve 144,000 m^2 of publicly accessible green space
- 50% increase in biodiversity space
- 2,520 trees/shrubs planted and 20% increase in canopy cover

St Johns Green

Case study 3: Cody Dock

(Manor Road Neighbourhood, Draft Local Plan)

4.130. In 2021/22 Gasworks Dock Partnership was awarded funding from the Green Recovery Challenge fund to undertake the 1st extensive biodiversity audit for Newham's Lower Lea tidal River with a view to identifying the wildlife and previously unrecorded habitats of significance that should contribute to the area's green and water strategies.

4.131. Following this, 3,000 local residents successfully applied for £12,000 from the Newham Community Assembly to install 70m of biodiverse riverside planting, a timber frame pergola and environmental education interpretation boards at Cody Dock.

4.132. Cody Dock has secured a further five years of funding from the National Lottery Climate Action Fund to continue its Citizen Science programme, working with research bodies to develop a better understanding of the urban ecology of the area and to develop new green infrastructure. This funding has led to the employment of a full-time Biodiversity Officer. An Education Officer has also been appointed to work with schools and youth groups to educate and engage the next generation and reframe the relationship with London's second river. The project was also featured recently on the BBC programme 'Wild Isles'.

Cody Dock

Up Garden - Activity area

Case study 4: Up Garden

(Forest Gate Neighbourhood, Draft Local Plan)

4.133. An abandoned laundry yard in a Newham council estate has been transformed by the local community into the UP Garden - a place for gardening, playing and socialising to support the physical and mental health of local residents.

4.134. In response to the climate change emergency, a 160 m^2 wildflower urban meadow and two 20 metre-long gravel drains have been installed in the asphalt yard. 14 water butts/tanks (draining a surface area of 230 m^2) capture 7500 litres of precipitation that would otherwise enter the sewer system.

4.135. There is a strong focus on sustainability: the majority of furniture and materials were donated by local businesses then upcycled by community volunteers. A micro-allotment scheme allows estate residents to grow edible plants.

4.136. The UP Garden hosts regular family workshops during term breaks, quarterly seasonal events (showcasing local talent), and was chosen to host a Newham coronation event attended by over 450 visitors. The UP Garden is open every day and entry is always free so that the space can be as accessible as possible.

Up Garden - Allotments

Case study 5: Beckton Corridor Pond
(Beckton Neighbourhood, Draft Local Plan)

4.137. This project known locally as 'Itchycoo Park' and started in 2019, in response to a level of frustration about the increasing level of fly tipping in the area. A small group of neighbours came together and after about two months the area had been thoroughly cleaned. A further three months' work was expended on removing the remaining fly-tip debris, overgrown vegetation and dead and fallen trees that prevented access. Significant amounts of debris were removed from the ponds to get rid of the green algae, duckweed and restore the health of the water. By opening up the space, anti-social behaviour was discouraged and personal safety improved.

4.138. Over the following 18 months, grassed areas were established, tables and seating provided and the site made safe for visitors to enter and enjoy. Waterfowl came back to the site for the first time in decades and populations of newts and frogs started to re-establish. When Covid hit, the pond proved to be a magnet for people when they emerged from lockdown and the pond area was often full, with people waiting beyond the railings for a place to sit. It has become a great area for people to interact with wildlife or just to relax and absorb the peace and tranquillity of nature in an urban setting. Mothers with babies and toddlers have also found the open area to be a nice place to introduce their children to the natural world.

4.139. This project has recently been awarded funding through the People Powered Places grant scheme to further improve the site.

Summary

4.140. In this section, we have considered Newham's policy and organisational context and inherent characteristics. Most significantly, this section identifies the notable demographic changes that the Borough will experience over the Local Plan period. The impact of these changes on ecosystem service flows from green and water infrastructure is considered in Section 5.

Itchycoo Park - before and after images of the pond