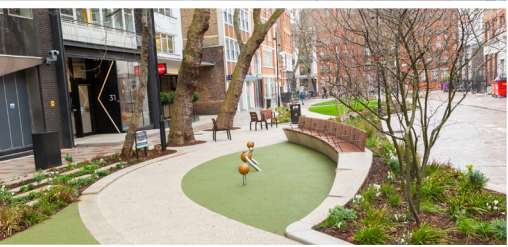


TACKLING THE CLIMATE CRISIS

CLIMATE ADAPTATION AND RESILIENCE PLAN 2023-2025



1. Introduction

1.1. Climate Adaptation and Resilience Plan overview

Camden Council has a strong track record of reducing greenhouse gas emissions that drive the climate crisis. Since 2005, borough wide emissions have fallen by 45% and, since 2010, emissions across our own estate and operations have reduced by 59%¹. However, the IPCC Sixth Assessment Synthesis Report (2023) emphasises that the impacts of the climate crisis are already here and being experienced across the globe. Camden is no exception; flooding across Camden in 2021 affected over 100 homes and businesses, disrupting lives and our local economy, while the July 2022 heatwaves caused significant spikes in respiratory related hospital admissions and damaged infrastructure in Camden.

This Climate Adaptation and Resilience Plan 2023-2025 is a two-year action plan designed to build our understanding of how climate hazards, such as flooding, and heat risk will affect Camden, while devising a set of activities to improve the borough's resilience to them. The Plan recognises that the impacts of climate crisis will be felt unevenly and members of the community with greater vulnerability to climate hazards will require the most support. The Plan also considers the risk that climate hazards will present to our infrastructure and physical assets, council services, nature and biodiversity and the local economy.

1.2. What is climate resilience?

Climate resilience refers to the capacity of a community or system to anticipate, prepare for, respond to, and recover from the adverse impacts of the climate crisis. A climate-resilient community is better equipped to withstand extreme weather events, rising temperatures, and other climate-related risks.

Climate adaptation is a key component of climate resilience. It involves implementing adjustments to minimise the risks posed by the climate crisis. Adaptation measures aim to increase the ability of

individuals, organisations, and communities to cope with and adjust to expected future climate hazards. Effective climate adaptation takes a proactive approach to identifying vulnerabilities and designing solutions that reduce risk to people and assets.

As the frequency and intensity of extreme weather events, such as heatwaves and flooding increase, so the need for proactive and coordinated efforts to build our climate resilience and adaptation will increase. The Climate Adaptation and Resilience Plan brings together actions to adapt Camden to extreme weather and build resilience to minimise the impact of climate-related events.

1.3. How does the Climate Adaptation and Resilience Plan relate to Camden's other environmental plans?

In 2019, Camden Council declared a climate and ecological emergency and committed to do everything we can to reduce greenhouse emissions in Camden to 'net-zero' by 2030. The resulting Climate Action Plan sets out a borough-wide vision for reducing greenhouse gas emissions across Camden and committed to develop a separate approach to improve Camden's resilience to a changing climate.

Given the importance of nature-based solutions to building climate resilience, the Climate Adaptation and Resilience Plan is supported by the delivery of Camden's Tree Planting Strategy (2020-2025) and Biodiversity Strategy: 'Creating Space for Nature in Camden'. This work aims to expand and enhance the quality of green infrastructure across Camden, supporting biodiversity, creating cool spaces, and reducing flood risk. These strategies are key in supporting nature positive solutions to building climate resilience.

Given that flooding is a key climate hazard for Camden, the Climate Adaptation and Resilience Plan is closely aligned with Camden's Flood Risk Management Strategy (2022-2027). The strategy sets out a coordinated approach for managing and reducing flood risk in a way that benefits people, property, and the environment.

¹The climate emergency - Camden Council

Camden's Transport Strategy² also supports the Climate Adaptation and Resilience Plan by seeking to incorporate trees and planting into new transport infrastructure wherever possible, with the aim of reducing heat and flood risk.

The Climate Adaptation and Resilience Plan is also supported by Camden's Emergency Management plans and procedures, such as the Multi Agency Flood Plan, which dictate how the Council will respond during an extreme weather event such as the flooding of 2021.

1.4. Why does this Plan only cover two years of action?

This interim Climate Adaptation and Resilience Plan is a two-year approach to enhance our understanding of the climate risks that our community faces, now and in the future.

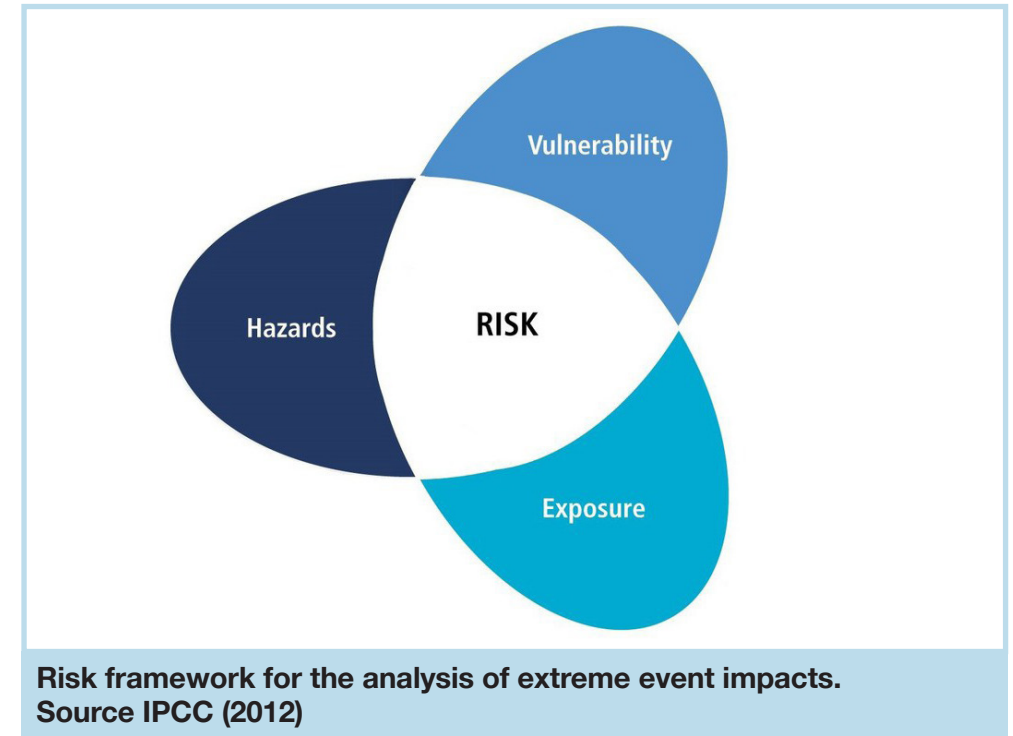
From our initial analysis of climate risks (Section 2), the process of identifying all vulnerabilities and designing an approach to adapting and building resilience to them will be complex and require significant engagement across multiple Council services and other statutory and risk management authorities. At the conclusion of this two-year plan, the goal is to have a comprehensive understanding of climate risks in Camden. This understanding will support the integration of resilience-building strategies into our next Climate Action Plan from 2025.

As Camden's communities increasingly feel the effects of climate change, we must also act now to prioritise protecting people. The plan therefore includes specific projects that will be delivered promptly to address these challenges. The plan will also initiate pilot projects that will put climate resilience building and adaptation strategies to the test before integrating into our approach.

2. Approach to understanding climate risks to Camden

2.1. Methodology

Camden Council commissioned the global environmental and engineering consultancy, Arup, to undertake a preliminary review of the availability and quality of data for a borough-wide climate risk and vulnerability assessment. Arup provided guidance on selecting the most suitable data to gain insights into potential climate risks affecting Camden. This work by Arup informed our approach to assessing climate risk in Camden. Our approach centres on identifying the climate hazards, and then determining potential vulnerability and exposure to these hazards to determine the level of climate risk.



²Camden's Transport Strategy

2.2. Hazards

Hazards are defined as the potential occurrence of a natural or human-induced physical event or trend related to weather and climate that may cause loss of life, injury, or other health impacts, as well as damage and loss to property, infrastructure, livelihoods, service provision, ecosystems and environmental resources³.

The key climate hazards facing Camden are defined in the following table.

Primary Hazards – higher likelihood of occurrence and potential impact		
Heatwaves	Flooding	Air pollution
Secondary Hazards – lower likelihood of occurrence and potential impact		
Extreme storms	Water scarcity	Fires

2.3. Vulnerability and exposure

Assessing the degree to which people and infrastructure are exposed and vulnerable to climate hazards requires an assessment of both the physical and social aspects of the system, including information about infrastructure quality and location, our residents and those who may be most vulnerable.

Potential entities exposed to climate hazards include residential areas susceptible to flooding from heavy rainfall, transport infrastructure (including roads and bridges, in flood risk locations), and old or poorly designed infrastructure, including buildings and drainage systems that are less resilient to climate hazards.

Those most vulnerable to climate hazards in Camden include elderly and disabled citizens who may have reduced mobility or have long term physical or mental health conditions that place them at heightened risk during extreme heat events. Low-income communities may also face heightened vulnerability, lacking financial resources for preparation and recovery from climate-related events.

³Glossary – Special Report on the Ocean and Cryosphere in a Changing Climate (ipcc.ch)

2.4. Stakeholder engagement

The Climate Adaptation and Resilience Plan has been developed with support from citizens, businesses, organisations and local stakeholders.

2.4.1. Residents

In December 2022, a public consultation on climate readiness garnered 112 responses, with over half expressing concerns about Camden's lack of preparedness and anxiety over potential disruption to critical services including transport systems. In July 2023, **Camden's Climate Citizen Panel**, stressed the importance of linking climate risks to public health and well-being in the proposed Climate Adaptation and Resilience Plan. They also suggested using videos and social media for plan dissemination and requested transparency regarding funding.



2.4.2. External stakeholders

In July 2023, Great Ormond Street Hospital, University College London Hospital, and the Royal Free Hospital highlighted the climate crisis's impact on healthcare, including how the 2022 heatwave caused ward closures and disruptions in medication supply chains. Flooding in July 2021 also restricted access to the Royal Free Hospital.



The Council has also engaged with Transport for London, the Greater London Authority, National Rail, the Corporation of London (owners of Hampstead Heath), University College London, the London School of Economics, Thames Water, and others to understand their efforts to build organisational climate resilience.

2.4.3. Collaboration across London

In November 2019, and London Environment Directors' Network (LEDNet) agreed a [joint statement](#) setting out the ambitions of Directors and Cabinet Members of London Councils to act rapidly and collectively on the climate crisis. The statement led to seven pan-London climate action workstreams, including the ambition of "Creating a Resilient and Green London". Subsequently, London Councils have worked together to produce an [Action Plan](#) identifying how this challenge will be tackled collectively across London. This Climate Adaptation and Resilience Plan responds to the action plan's recommendations.

In Summer 2023, the Mayor of London announced the launch of the London Resilience Review, which is an independent review to take stock and make recommendations to guide London's preparations for more extreme weather. The outcome of the Climate Resilience Review is due to be published in December 2023 and the findings will inform the delivery of Camden's Climate Adaptation and Resilience Plan.



3. Camden's key climate risks

3.1. Primary Hazards

3.1.1. Heatwaves

In the UK, a heatwave is officially declared when a location experiences at least three consecutive days with daily maximum temperatures exceeding the designated temperature threshold of 28°C.

The frequency of heatwaves in Camden is increasing.

- Since 2006, Camden has experienced five record-breaking hottest days on record, the most recent with temperatures reaching 40.3°C
- Between 2000 and 2020 the UK experienced 84 heatwaves⁴

The intensity and duration of heatwaves in Camden is expected to increase as a result of the climate crisis.

- By the 2080s, the UK could witness an average maximum summer temperature increase of 7.3°C compared to temperatures in 1961-1990.
- In the past 60 years, the average heatwave days a year has increased from 6 to 18 days.
- By the end of the century, we can expect 40°C days to occur every 3-4 years. These temperatures have been recorded once in the UK.

A significant contributing factor to the amplified heat in Camden is the urban heat island effect. Situated in the heart of London, Camden is surrounded by an urbanised landscape characterised by concrete structures, asphalt roads, and limited green spaces. These urban features absorb and retain heat, making cities noticeably warmer than rural areas.

⁴<https://research.reading.ac.uk/research-blog/heatwaves-are-an-invisible-killer-and-the-uk-is-woefully-unprepared/>

Case Study: Heatwave Summer 2022

In Summer 2022, Camden experienced an unprecedented and prolonged extreme heat event that spanned five distinct heat periods between the middle of June and the end of August.

On 19 July 2022, Camden, along with other areas in the UK, faced record-breaking temperatures exceeding 40°C. During this period, the Extreme Heat National Weather Warning Service issued its first-ever red warning for extreme heat. This extreme heat had several significant impacts.

- The heatwave led to a surge in 999 calls. Two London hospital experienced IT system failures and a fifth of UK hospitals had to cancel operations.
- There were over 3,000 excess deaths related to the heatwave across the UK.
- National Rail issued 'do not travel' advice for passengers to protect health. Rail services suffered severe disruptions due to track buckling.

The heatwave also led to wildfires across London and further damage to the Hammersmith Bridge, demonstrating how climate hazards can affect vulnerable infrastructure.



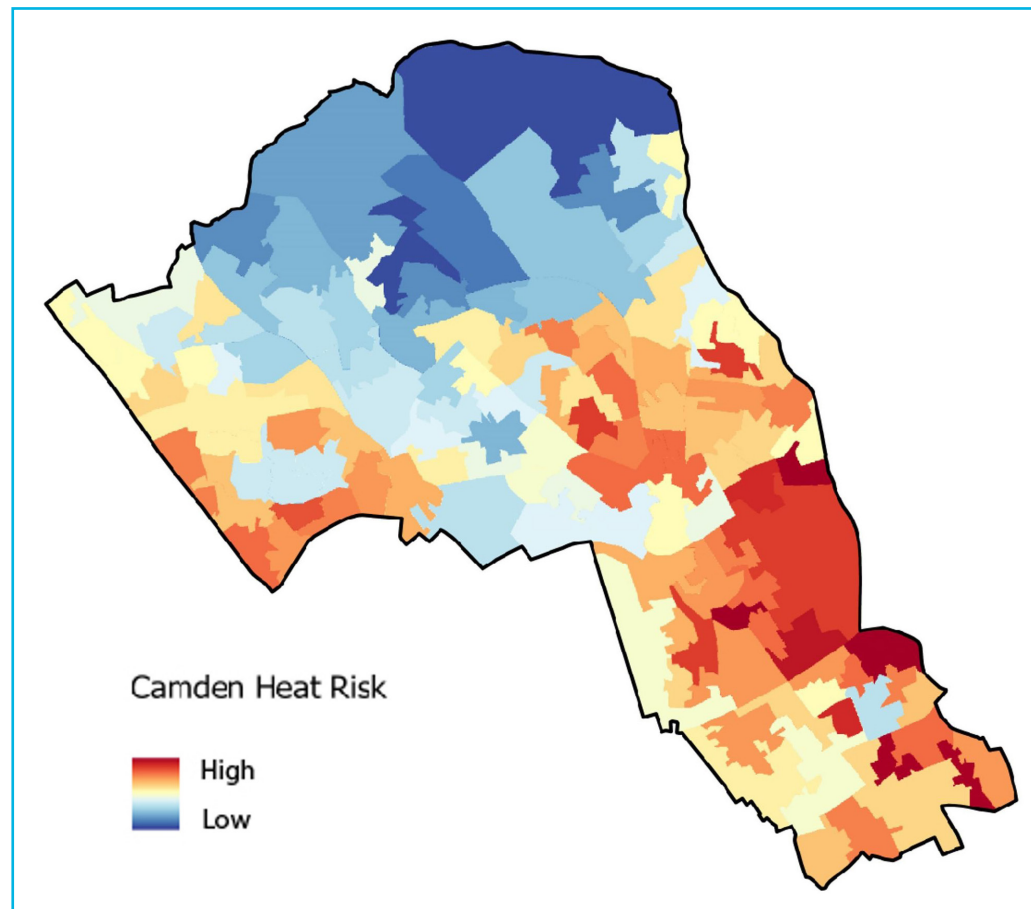
Heat Risk Mapping for Camden

London Climate risk maps produced by Bloomberg Associates in collaboration with the Greater London Authority analyse exposure and vulnerability to climate hazards across Greater London. Heat risk layers form part of the climate risk maps and define areas at higher risk of heat-related health impacts.

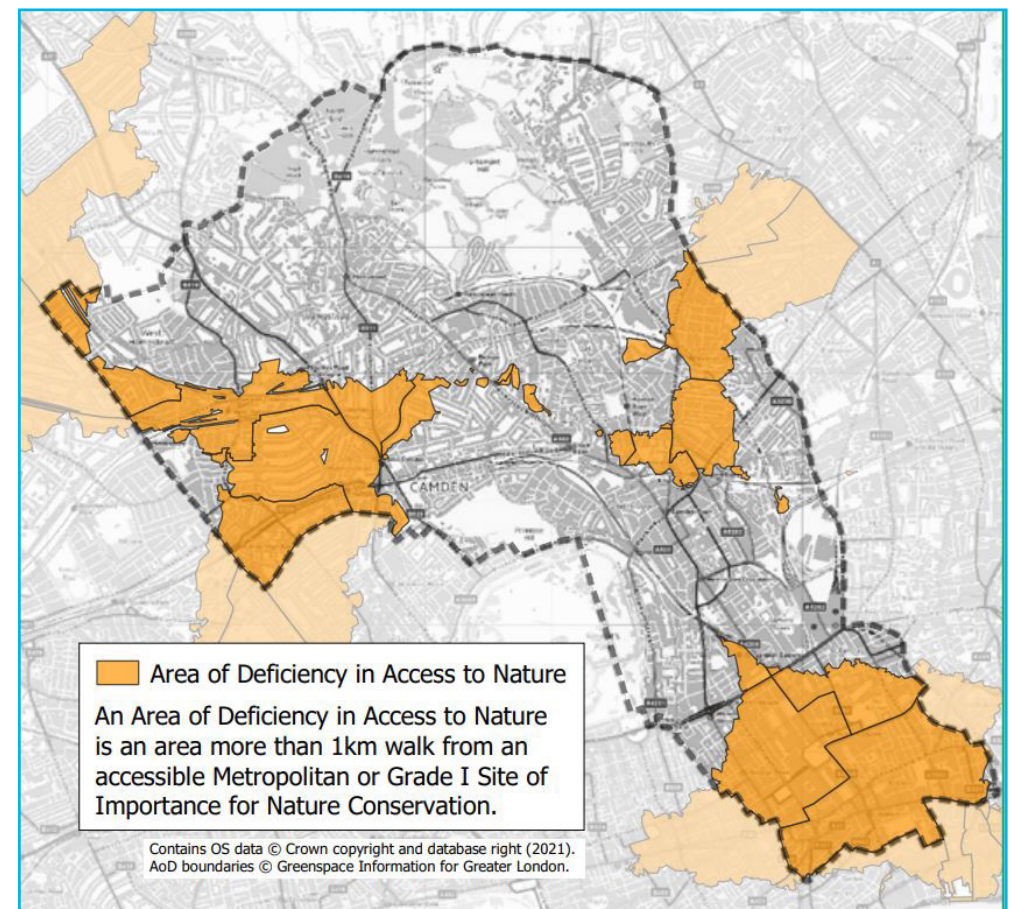
Mapping shows that the area of greatest heat risk in Camden is to the south and centre of Camden, as well as the west of the borough in and around Kilburn. These are areas with relatively low access to green space– defined as more than 1km walking distance from a publicly accessible Borough or Metropolitan Site of Importance for Nature Conservation.

The main physical intervention we have for mitigating heat risk to health is by increasing greening in the borough.

GLA Heat Risk Map



Deficiency in Access to Nature



Vulnerability and Exposure to heatwaves

Vulnerability and exposure to climate risks have been categorised into five key areas as follows:

People and Communities

- Vulnerable groups during heatwaves in Camden include older age groups (75+), babies and young children (0-4 years), people with health conditions (especially heart, lung, or kidney conditions), mental health conditions, low-income households, and pregnant women.
- Lack of awareness among vulnerable groups about heat risks and how to stay cool further exacerbates the problem. Addressing these challenges requires raising awareness, providing information, and offering support to those at high risk.
- Lack of greening in the public realm can increase exposure to heatwaves.

Infrastructure and physical assets

- Heatwaves in Camden pose risks to critical physical infrastructure, including buildings, electricity networks and transportation.
- Vulnerabilities in infrastructure are influenced by factors including asset age, maintenance, and construction materials, necessitating proactive measures and area-specific policies for new developments to withstand future heat-related challenges.

Council services

- Heatwaves can impact services provided by the Council to our communities. Our primary concern is ensuring essential services continue to maintain resident safety to the heat.
- Challenges include increased demand for caregiver support and safety in sheltered housing, assisted living accommodation and schools, retrofitting buildings to cope with high temperatures, maintaining green spaces and highways.

Businesses, organisations, and local economy

- Rising summer temperatures in Camden affect businesses and the local economy.
- Business vulnerabilities include hazardous working conditions in construction, healthcare service disruptions, decreased foot traffic in retail and hospitality, and reduced travel in transportation.
- Location and business type influence exposure to heat-related impacts.

Nature and environment

- Heatwaves have significant impacts on nature and the environment, especially in urban settings. Heat stress and drought conditions can harm plant life and wildlife, potentially hindering the survival of grass, plants, and trees, and subsequently local biodiversity. Drought conditions can also make plant life more susceptible to disease.
- Drought conditions and heat stress can lead to soil hardening and reduced water absorption, increasing the risk of flooding after heavy rainfall.

What next?

- **We will prioritise residents' preparedness and protection from heatwaves.**
- **We will provide risk information and guidance for businesses and residents, prioritising support for vulnerable groups.**
- **Focus on areas with heightened heatwave risk with limited green spaces, emphasising infrastructure resilience to increased temperatures during planning and development.**
- **We will understand the risk of heat risk to Camden's environment and deliver green infrastructure to reduce risk, in high-risk areas.**

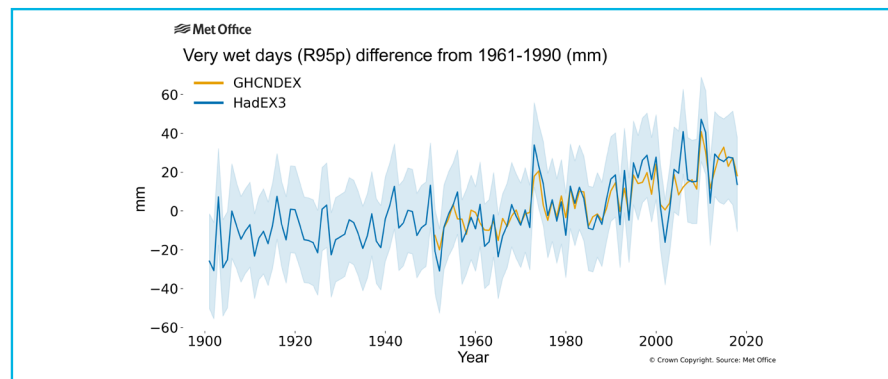
3.1.2. Flooding

Camden is susceptible to surface water flooding and has experienced three significant flood events in the past 50 years, occurring in 1975, 2002, and recently in July 2021. Notable flooding also occurred in 2022. Flooding in Camden occurs when intense summer rainfall exceeds the capacity of the drainage network, causing water to flow over the surface into buildings, or to be forced back up through street manholes and into buildings from the main sewer.

Climate change is making Camden summers drier with more periods of intense heavy rainfall – increasing flash flooding risk.

- On 12 July 2021, twice the average monthly rainfall fell in just two hours. This was part of the 5th wettest three-month period on record.
- In August 2022, flash flooding caused disruption to Kings Cross, St Pancras and Euston stations, and partially blocked Euston Road.
- Compared to the climate in 1990, summers in 2070 are predicted to be 60% drier and heavy rainfall will increase by 20% and occur twice as often⁵
- The intensity of downpours could increase by 5-15% per °C of regional temperature warming⁶

Camden's approach to managing flood risk in partnership is outlined within the Flood Risk Management Strategy, which provides more information on flood risk across Camden and the work underway to reduce risk and protect the borough.



⁵<https://www.metoffice.gov.uk/weather/climate-change/climate-change-in-the-uk>

Case Study: Camden Summer Flash Flooding July 2021

In July 2021, a major flooding incident occurred in Camden because of two storm events on the 12 and 25 July 2021. The intensity of rainfall in some areas of Camden was at a level we would expect to experience less than once in every 100 years.

The Thames Water combined sewer network was unable to accommodate the rainfall, resulting in surface water and sewer surcharge flooding. The flooding in Camden impacted over 100 residential properties causing several emergency re-accommodations and flooded 12 businesses. Roads were inundated with flood water causing disruption to local services such as buses, as well as personal travel with the breakdown of vehicles. Rail and tube transport was interrupted, and some stations closed entirely.



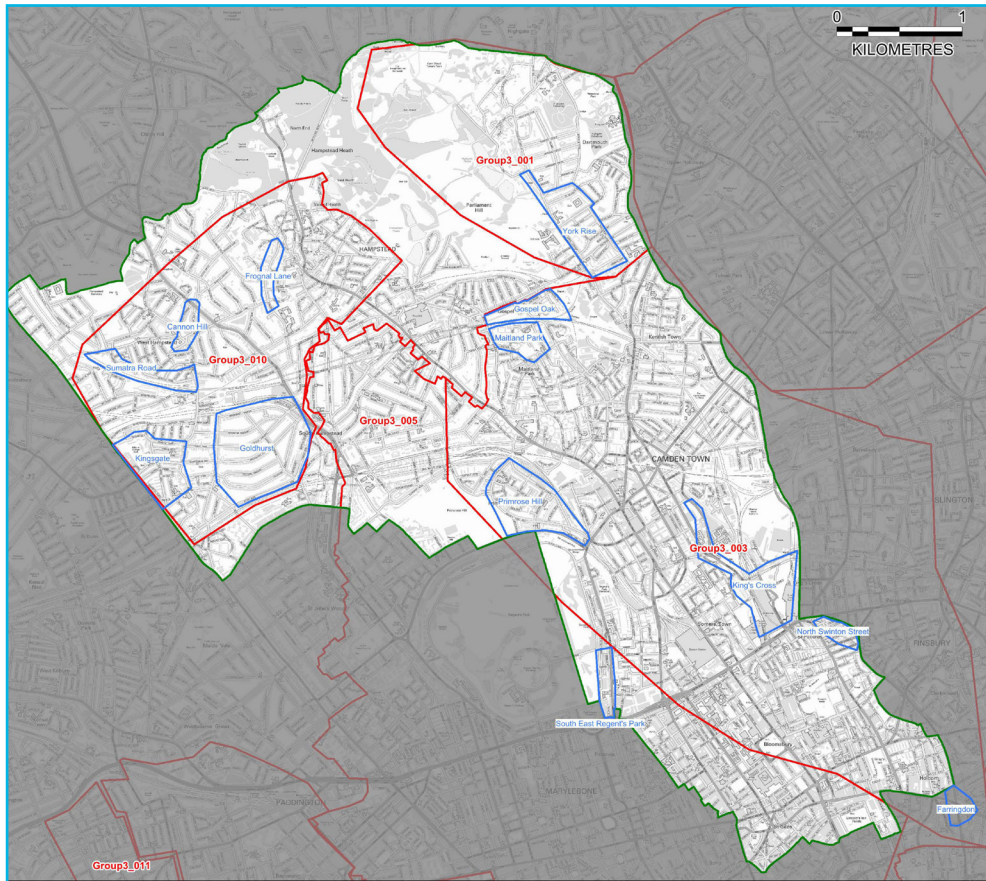
⁶<https://www.metoffice.gov.uk/about-us/press-office/news/weather-and-climate/2023/new-research-shows-increasing-frequency-of-extreme-rainfall-events>

Flood Risk Mapping

Local Flood Risk Zones

Exposure to flooding varies across Camden. Camden's Strategic Flood Risk Assessment identifies twelve Local Flood Risk Zones (LFRZs). LFRZs are areas deemed to be at higher risk of flooding, and therefore, people within these areas face an increased risk of flooding.

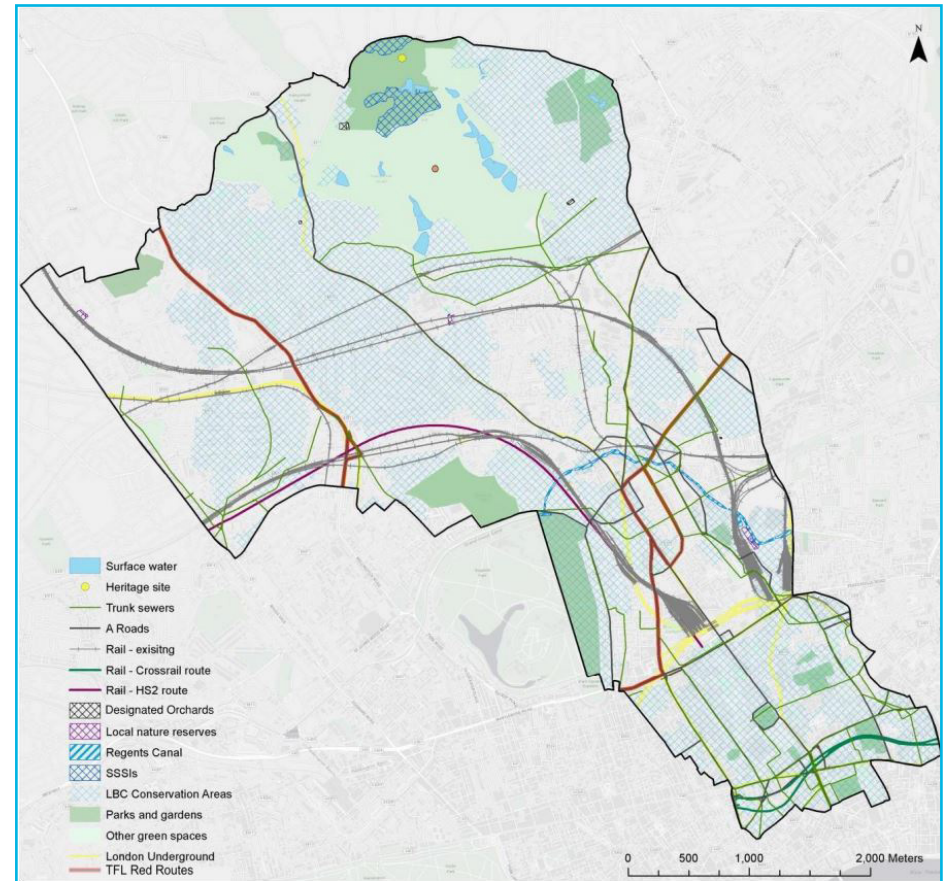
Previous flood events have mostly impacted South Hampstead, South End Green and parts of West Hampstead and Kilburn. This information and the FRMS helps to target our approach to protecting people and infrastructure.



Primary infrastructure

TfL red routes are mainly comprised of Euston Road and the King's Cross gyratory, Hampstead Road, Finchley Road, sections of Camden Road and Camden High Street. Trunk sewers are critical for managing flood risk; these predominantly follow the main roads in the borough. Camden is home to major rail termini at Euston Station and Kings Cross and busy below ground tube networks. Camden has 38 areas designated as Sites of Importance for Nature Conservation (SINCs), covering almost 414 hectares.

We will work with stakeholders who maintain these assets to ensure they can manage flood risk and are resilient to the impacts of flooding.



Vulnerability and exposure to flooding

Vulnerability and exposure to climate risks have been categorised into five key areas as follows:

People and Communities

- Increased flooding events will lead to more property evacuations, property damage, displacement, and financial distress – alongside mental health impacts.
- Vulnerable groups including the elderly, disabled, and those with medical conditions face challenges evacuating during floods and recovering afterward, requiring additional support.
- Low-income households may be at higher risk due to limited resources for flood resilience measures. Others may lack understanding about flood risks and preparation options.

Infrastructure and physical assets

- Flooding poses substantial risks to critical infrastructure and assets, including housing, transportation networks (roads and railways), healthcare facilities, electrical systems, educational institutions, and recreational spaces.
- The vulnerability and exposure of physical assets to flooding depends on factors such as their age, condition and location.

Council services

- Camden Council provides essential services, and flooding can disrupt housing, transportation, access to public space, and support for vulnerable residents.
- Council-owned assets including offices and schools may need to close due to flooding, affecting the community with potential accommodation needs and reduced access to services.
- Flooding also impacts day-to-day services, causing delays in bin collections, transportation, housing services, street cleaning, and repairs.

Businesses, organisations, and local economy

- Flooding poses a significant threat to businesses and the local economy, with locations in flood risk areas and the type of business determining its vulnerability and exposure.
- Business closures due to flooding can result in substantial financial loss, including repairs, lost profits, and even permanent closure, affecting employees and local revenue.
- Additional implications include disrupted supply chains, reduced foot traffic, high insurance premiums, and property depreciation, all impacting business profitability and sustainability.

Nature and environment

- Flooding can harm green spaces, leading to habitat loss, vegetation damage, and soil compaction, which may exacerbate flooding.
- Flooding and heavy rainfall can cause erosion of surfaces including soil banks, and cause landslips and increase pressure on retaining walls.
- If green spaces become flooded, this can inhibit access and maintenance schedules further exacerbating the impacts outlined above.

What next?

- **We will prioritise ensuring residents' and communities' preparedness and protection from flooding in high-risk areas.**
- **We will work with other stakeholders to develop resilient infrastructure and social and council services.**
- **We will work with businesses to develop guidance and materials to build preparedness for flooding.**
- **We will increase the amount of green infrastructure to alleviate flood risk and seek to protect green spaces from flood damage.**

3.1.3. Air Pollution



Air pollution is the largest environmental threat to public health in the UK, and up to 36,000 premature deaths each year are attributable to air pollution exposure. Of these, 4,100 are in London, and in Camden particulate air pollution is responsible for 7% of all deaths⁷. Changes to climate conditions in Camden will influence the quality

of the air we breathe. Global heating can increase concentrations of ground-level ozone and particulate matter, with higher temperatures trapping pollutants close to the ground. Droughts and fires can also increase the amount of windblown dust and smoke in the air⁸.

The Camden Clean Air Strategy 2019-2034⁹ is the overarching vision for clean air in the borough. The Camden Clean Air Action Plan 2023-2026 sets out the actions to be taken during by the Council and partners towards fulfilling the Camden Clean Air Strategy.

Although climate change exacerbates the conditions which contribute to poor air quality, unlike other climate risks, the main driver of poor air quality is not climate change, but the emissions associated with the combustion of fossil fuels in road vehicles and buildings, alongside ultra fine particulate matter from construction sites, agriculture and biomass combustion including wildfires at significant geographical distance from Camden. Camden's approach to tackling poor air quality and building resilience to the impacts will continue to be delivered and monitored through the Clean Air Strategy, with projects which intersect with other climate hazards outlined within this Climate Adaptation and Resilience Plan.

⁸<https://www.epa.gov/climateimpacts/climate-change-impacts-air-quality>

⁹https://www.camden.gov.uk/documents/20142/0/Camden+Clean+Air+Action+Plan+2023-2026_Final_2022.12.19+%282%29.pdf/ad618e94-0113-696d-5fc6-104d8969ab5a?t=1671619123044

3.2. Secondary Hazards

Extreme storms

- Storms, such as Storm Eunice in February 2022, can occur at any time and bring severe impacts, including high winds.
- The Met Office predicts an increase in winter wind speeds and storm frequency in the second half of the 21st century, posing safety risks and potential for property damage and damage to trees¹⁰
- To safeguard Camden from extreme storms and high winds, collaboration with stakeholders and utility providers will be essential, focusing on protecting critical infrastructure including power lines and ensuring resident safety during hazardous weather events.

Water scarcity

- Water scarcity due to climate change is increasing the risk of prolonged water supply disruptions, with a 1 in 4 chance of severe drought-related water cut-offs in the next 30 years¹¹.
- Drought and drinking water shortages can disproportionately affect vulnerable populations, leading to public health concerns¹², and impacting animals and plants ability to survive.
- To protect Camden, collaboration with Thames Water and stakeholders will be required to promote water efficiency and plan for severe drought events alongside first responders.

Fire

- There could be up to a 50% increase in wildfires by 2100 due to climate change¹³. In the July 2022 heatwave, London experienced over twelve fires that destroyed more than 40 buildings.
- Wildfires pose threats to both the environment and people, including displacement, health issues from smoke inhalation and potential fatalities.
- To protect Camden residents, collaboration with the London Fire Brigade and stakeholders is vital to provide fire prevention information and regulations during dry conditions.

¹⁰ Recent trends and future projections of UK storm activity - Met Office

¹¹ Preparing for a drier future (nic.org.uk)

¹² Public health impact of drought: advice for the public - GOV.UK (www.gov.uk)

¹³ Up to 50% increase in wildfires by 2100 - Met Office

4. Climate Resilience Action Plan

The Climate Resilience Action Plan outlines 14 outcomes the Council and other stakeholders will work towards to build resilience to climate risks in Camden. The outcomes will seek to adapt Camden to extreme weather to minimise the impact of climate-related events. By delivering projects across 5 strategic areas (outlined below) we can transform Camden into a resilient and sustainable borough, fostering positive change while addressing the challenges posed by the climate crisis. This approach would not only create a legacy of resilience, inspiration, and commitment but also unlock the potential for a greener, more prosperous community that extends beyond our borders. Building a resilient Camden means reimagining our borough, enhancing our public spaces and infrastructure, embracing innovation, and setting an example for others.



People and communities:

Support and enable all those who live and work in

Camden to protect themselves and their community from climate risks. Work with partners such as the NHS and Greater London Authority to provide good quality information about how to build resilience.



Assets and infrastructure:

Adapt Camden's buildings and infrastructure,

ensuring that the most vulnerable and exposed to climate hazards are identified and adapted, prioritising nature-based solutions to develop this climate resilience. Adapt social infrastructure such as healthcare systems and schools to build resilience.



Businesses, organisations and local economy:

Foster an economy that can withstand

and recover from short- and long-term climate impacts. Ensuring Camden businesses can maintain operations with minimal disruption during and after climate events. Businesses will support the delivery of green infrastructure.



Council services:

Embed climate resilience practices across all Council services, ensuring

that they can continue to support our residents during summer heat waves, flooding and other climate hazards. Ensure council services respond effectively during a severe weather event.



Nature and environment:

Create an environment where ecosystems can thrive, and biodiversity can succeed. Build the resilience of our green spaces so they can withstand severe weather events.

4.1. Funding climate resilience in Camden

Funding for flood risk mitigation mainly comes from the government's Flood and Coastal Erosion Grant in Aid program, with additional contributions from the Thames Regional Flood and Coastal Committee, Thames Water, and the Greater London Authority. Camden's funding approach involves accessing these sources whenever possible and integrating green infrastructure into our transport and green space investments to achieve cost-effective resilience outcomes. Nature-based solutions are significantly more cost-effective (up to 50%) and deliver greater added value (28%) compared to artificial alternatives for addressing heat risk.

Camden Council operates a Green Space Investment Programme (GSIP) to ensure capital investment in parks and green spaces are tailored to the needs of local communities. Funding sources for the programme include **S106 agreements, Community Infrastructure Levy**, external funding, and capital receipts. The GSIP is delivering various projects including green spaces in Euston to offset the impact of HS2, play area improvements across the borough, investment in historic sites such as St Pancras Gardens and the creation of new green spaces such as Mount Pleasant pocket park and the Greening Phoenix Road project. We will continue to use the GSIP to build climate resilience across Camden through investment in nature-based solutions that green the grey.

A significant upcoming initiative is the development of a green corridor across Camden in partnership with businesses and major institutions. The Bloomsbury Vision project is an example of this, aiming to create a sustainable, safe, and well-connected public realm in Bloomsbury while involving key stakeholders to establish a holistic strategy that incorporates green infrastructure and bolsters climate resilience (Section 4.5).

However, despite these funding models for public spaces, there is limited funding available for other resilience-building measures, particularly those related to adapting existing buildings to a changing climate and supporting vulnerable citizens. The Climate Adaptation and Resilience Plan will require the Council to collaborate with London boroughs and the Greater London Authority (GLA) to advocate for additional funding to support projects aimed at enhancing adaptation and resilience within our community.

Funding for the maintenance of additional green spaces and infrastructure is also limited and the Council will need to work with community volunteers to service new green infrastructure and source additional funding for increased maintenance responsibilities.

Case Study: Savernake Road

Camden's Transport Strategy identifies opportunities for increased planting and urban greening in all projects with the aim of providing shade, shelter, and the management of rainwater to reduce the risk of flooding.

The Savernake Safe and Healthy Streets scheme was designed to restrict motor vehicle traffic on Savernake Road and Constantine Road, whilst extending the pavement to create more space for pedestrians alongside new trees and planting. The trees provide shade for pedestrians, and the planting here and delivered in other transport projects across Camden will help to make the area cooler during heatwaves. By changing paved areas into permeable planting areas, the ground can hold more rainwater, which can help to lower the risk of flooding during severe rainfall.

The work on Savernake Road is just one example of how we're integrating climate resilience into the Council's investment plans.

The Council's Transport Strategy is delivered through funding from Transport for London, capital funding.



4.2. Actions to protect People and Communities

Providing information to residents about how they can protect themselves from climate hazards such as flood events and heatwaves is an immediate and cost-effective action that the Council and other stakeholders can take to empower individuals and communities to build resilience to the climate crisis.

Advice may involve highlighting how simple, low-cost measures at home can improve preparedness, or promoting behaviours such as staying hydrated, seeking shade, and avoiding strenuous activities during heatwaves. Similarly, flood risk messaging can inform individuals about the importance of being prepared for summer flash flooding, including having essential documents and medication ready when severe weather warnings are issued.

Public health professionals play a crucial role in providing information to residents about how environmental factors can influence their health and wellbeing. The Council is working with public health professionals to address the impacts of poor air quality on health through the Camden Clean Air Strategy. The Council aims to build upon this approach to communicate the risks posed by extreme heat to human health.

Partner organisations, such as the Greater London Authority, the London Fire Brigade and Thames Water play a key role in providing information to people and communities on how to protect themselves during flooding and heatwaves.

Providing information and guidance in a format that is accessible to all, including in different languages, will be a key principle of our approach.

Outcome 1: Camden's community is empowered to protect themselves against climate risks.

Actions
Use Camden Council's communication channels to disseminate guidance on preparing for and staying safe during extreme weather events.
Provide timely weather updates and warnings in advance of potential climate-related events.
Develop informative leaflets and videos with advice and information on how to protect against climate hazards
Create a community toolkit that offers practical and accessible strategies for residents to bolster their resilience against climate-related hazards.
Support the development and implementation of a community flood plan in collaboration with the South Hampstead Flood Action Group. Seek funding to expand this programme to other neighbourhoods.
Through the Somers Town Future Neighbourhoods programme initiate and execute a community resilience plan specific to the needs of Somers Town.

Case Study: Community flood plan

The Council has collaborated with Thames Water, the National Flood Forum, and the South Hampstead Flood Action Group to enhance community resilience against flooding in South Hampstead. This area has been notably affected by flooding during the three significant flooding events documented in Camden in 1975, 2002, and 2021.

The community flood plan has led to the formulation of measures such as community leaf litter clearance and surveys of basement properties with elevated flood risk exposure.



Case Study: Camden Summer Magazine

The Camden Magazine is a quarterly publication produced by Camden Council. In the, the Camden Magazine dedicated a section to providing information and advice on how citizens of Camden can safeguard themselves and their neighbours during heat waves.



Get set for summer 

With the school holidays just around the corner, here's a checklist to help you stay safe and well this summer:

- ✓ **Make sure your kids' vaccines are up to date**

Measles cases are increasing in London, with some linked to overseas travel. The best way to prevent measles is to have the measles, mumps and rubella (MMR) vaccine, which every child can have for free at their GP.

Whether you're staying at home or going away this summer, help to keep your family safe by checking with your GP that your children are vaccinated against measles – and booking an appointment for any vaccines they need.

Find out more about the MMR vaccine nhs.uk/MMR

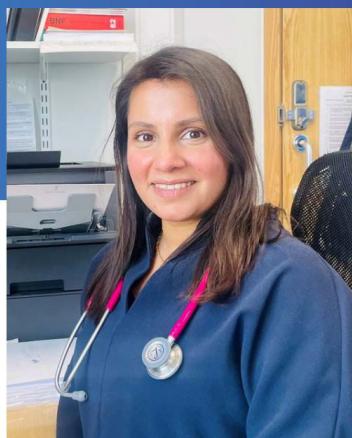
- ✓ **Plan ahead for hot weather** 

It's already been very hot in London this summer. Keep yourself and the people around you safe by planning ahead to avoid the heat and scheduling activities for cooler times of the day. Check on family, friends and neighbours who might need more help: children and babies under 5, people aged over 65 and those with underlying health conditions are at more risk in very hot weather. Find more tips gov.uk/ukhsa/beat-the-heat

Join us at health events across Camden

We have activities all over the borough in July and August to help you and your family keep healthy and well, from wellbeing walks to sports and outdoor activities, to NHS health checks on our health bus – find an event or activity near you on **pages 5 to 12**.

4 Camden Summer 2023



“All children need two doses of the MMR vaccine to protect them against diseases including measles, which can be really serious. If you're not sure if you or your child have had all of your vaccinations, contact your GP practice who can book you in for any vaccines you need.”

Dr Nitisha Nahata from Hampstead Group Practice

Outcome 2: Health and social care professionals understand the health impacts associated with heat risk and other climate hazards and use this knowledge to protect public health.

Actions

Use health outcome data to integrate heat risk health advice into healthcare information and services, with a focus on vulnerable and exposed populations.

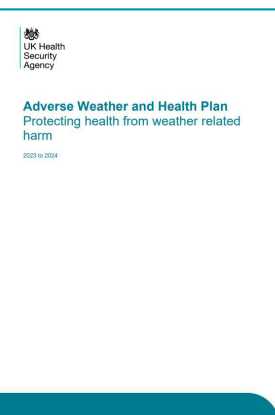
Work with external partners in healthcare, social care, and public health to mitigate the adverse impacts of climate change on public health.

Standardise the inclusion of health impact information in communications related to heatwaves to enhance public awareness of the health risks associated with heatwaves.

Work with frontline Council staff, including housing officers and home care workers, to integrate heat risk health advice into standard service provision.

Case Study: National Adverse Weather and Health Plan

The national Adverse Weather and Health Plan¹⁵ encompasses a range of measures and guidelines geared toward mitigating the adverse health during severe weather events, such as periods of extreme heat and cold. It includes an approach to raising public awareness about heatwave risks and safety measures, providing healthcare professionals with guidance on identifying and treating heat-related illnesses, ensuring readiness of health and social care services to handle elevated demand during heatwaves, and fostering coordination with various agencies for a unified response. This plan is complemented by the UK Health Security Agency's Hot weather and health: guidance and advice¹⁶ and Cold weather and health: guidance and advice¹⁷.



¹⁵ <https://www.gov.uk/government/publications/adverse-weather-and-health-plan>

¹⁶ <https://www.gov.uk/government/collections/hot-weather-and-health-guidance-and-advice>

¹⁷ <https://www.gov.uk/government/collections/cold-weather-plan-for-england>

Outcome 3: Partner organisations proactively share information on how to mitigate climate hazards, including preventing fires and conserving water during drought.

Actions

Work with Thames Water to provide residents with information on how to protect from sewer surcharge flooding and conserve water.

Collaborate with the voluntary and community sector to expand the reach of climate advice to residents who may not typically engage with Council communications.

Work with the Greater London Authority and London Fire Brigade to provide information to residents on how to reduce risk of fires during heatwaves.

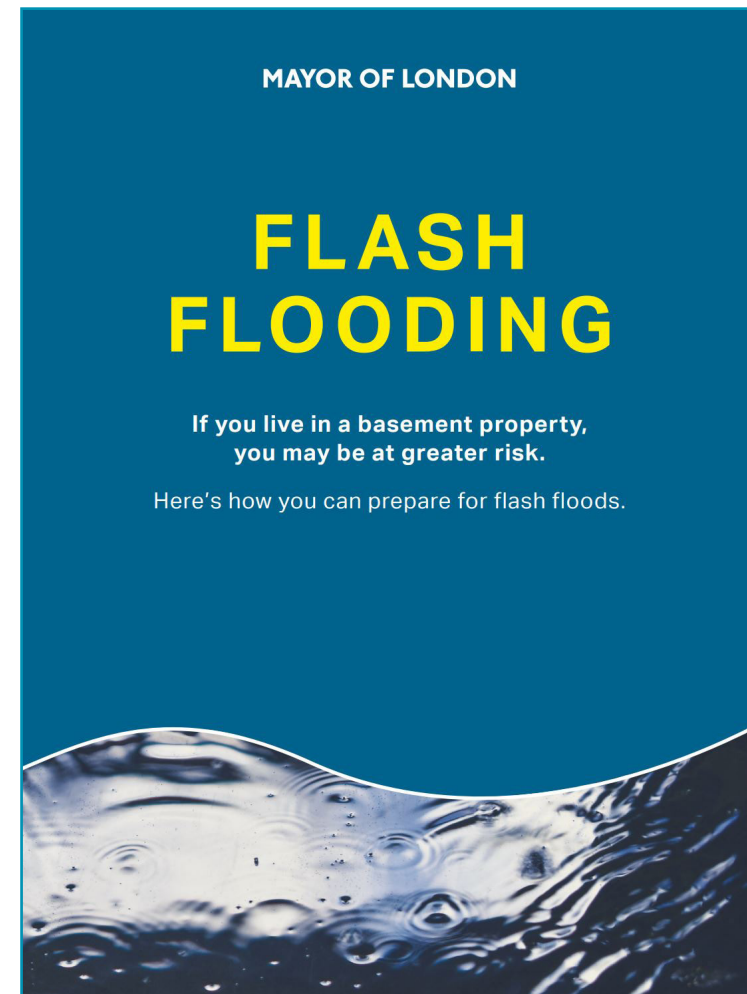
Case Study: Voluntary Action Camden – Voluntary and community sector (VCS) resilience

Voluntary Action Camden (VAC) has been awarded funding from the Greater London Authority, in partnership with London Plus, to undertake a detailed review of the lessons learned from responding to recent emergencies, such as the pandemic, refugee crisis, and flash flooding. The aim of this project is to develop a response framework—a visual tool that outlines who to contact in an emergency and defines roles and responsibilities within the Voluntary and Community Sector (VCS), the Council and other emergency responders. Subsequently, these findings will be shared across the sector.



Case Study: London flash flooding leaflet

In the summer of 2022, in response to flooding events across London in July 2021, the GLA and Camden Council provided an information booklet to basement properties in the borough to help residents build preparedness for potential flooding. The leaflet also provides guidance on emergency procedures in the event of flooding.



4.3. Actions to adapt and protect infrastructure and physical assets

A climate resilient Camden requires physical assets and infrastructure such as roads, public spaces and buildings to be able to withstand climate hazards such as extreme heat and flooding. To determine how exposed existing assets and infrastructure are to climate risks, the Council will need to support third party asset owners and statutory authorities such as Transport for London to build their understanding of the issue and the approaches to managing risk. These assets may also need to be adapted to protect people from climate risks, such as ensuring public transport is cool and safe to use in periods of extreme heat.

The Council will also need to assess the condition of its own assets to identify those which are susceptible to climate risks and devise appropriate adaptation and resilience strategies, for example through the introduction of trees and planting in the public realm to reduce flood risk and improve shading. The amount of green infrastructure in the public realm and on Camden estates will also need to be increased to reduce the risk of flooding and to mitigate the urban heat island effect (section 3.1.1).

New assets and infrastructure must also be designed to be resilient to future climate scenarios. Planning policy will be used to ensure that new buildings are designed to withstand climate risks. The Council will advocate for the integration of green infrastructure in all new development and construction projects, offering a cost-effective means to build climate resilience incrementally.

Social infrastructure, including educational institutions and hospitals, must enhance their resilience to climate risks to ensure their continued operation during extreme weather events and to protect the health and wellbeing of children and other vulnerable populations.

Outcome 4: Camden's public realm and estates are adapted to provide protection to people from climate risks.

Actions

Undertake Healthy Streets Checks for major transport projects to ensure resilience building measures are included in the proposed design and final project.

Identify opportunities to enhance green spaces on Camden estates, by planting additional trees and increasing greening.

Use flood and heat risk data to support decision making on the prioritisation of green space and transport investment programmes.

Further to a pilot project in Parliament Hill with Cadent (see Case Study), work with 3rd parties to identify opportunities to incorporate green infrastructure into projects that improve 3rd party assets.

Case Study: Installation of Green Infrastructure - Camley Street

The Camley Street Raingardens project was delivered by the Council as part of the London Strategic SuDS Pilot and was jointly funded by Thames Water, Camden Council and contributions from local developments obtained through the Planning process.

The 135-metre-long sustainable drainage system (SuDS) was completed in March 2021 and disconnects an area of 1,537 m² from the sewer by providing 142 m² of raingardens to a depth of 1m to hold rainwater before it enters the sewer. There are also 11 tree pits and beds containing over 30 diverse herbaceous planting and bulbs, contributing to local biodiversity improvements.



Case Study: Collaborative street works partnership with Cadent Gas

Camden and the Greater London Authority (GLA) have partnered with Cadent Gas and the Environment Agency to address flooding issues experienced in the Parliament Hill area during the July 2021 events.

By cross-referencing GLA data on planned utility works in Camden with flood risk data, it became evident that this location provided an opportunity for the coordinated installation of raingardens alongside new gas infrastructure and road reinstatement. Cadent Gas are collaborating with the Council's streetworks contractor to integrate the raingardens into the reinstatement works.



Outcome 5: Understand where high-risk existing infrastructure and assets are located and develop their resilience.

Actions

Conduct a risk assessment of assets owned by Camden to gauge their resilience to future climate-related risks.

Work with statutory authorities such as Transport for London, Network Rail and Thames Water to improve the climate resilience of assets and infrastructure in Camden.

Lobby statutory authorities to improve the climate resilience of their assets serving Camden.

Consider flood and heat risk in the review of the Council's Asset Strategy and incorporate overheating risk assessments into existing building retrofit projects.

Case Study: Brookfield School Overheating assessment

The Council is working on a retrofit project for Brookfield School to improve its energy efficiency and reduce carbon emissions. The school is not currently prepared for extreme heat and was forced to close during the heatwave of July 2022, due to excessively high temperatures in multiple classrooms.

As part of the retrofit project, the school was provided with an overheating assessment in accordance with CIBSE overheating guidance (TM52 and BB101). This assessment helped identify the necessary modifications to maintain a comfortable temperature within the school. Subsequently, these recommendations have been integrated into the retrofit project proposals.



Outcome 6: New buildings and infrastructure are designed to be resilient to future climate risks.

Actions

Review proposals for major developments and assess the opportunity to integrate further sustainable drainage or cooling measures (such as green roofs) into the proposed design.

Ensure that all major new Camden Transport schemes in flood and enhanced heat risk locations incorporate green infrastructure.

Enhance planning policy through the review of the Local Plan, to increase green infrastructure and sustainable drainage installed in new developments.

Collaborate with developers to identify opportunities for the delivery of green infrastructure within and outside of the development boundary.

Case Study: Alfred Place Gardens

Running parallel to Tottenham Court Road, Alfred Place was a service road with limited traffic, narrow pavements, and limited community amenity. The Council has transformed this street into an inviting linear park now renamed Alfred Place Gardens. It is Camden Council's first new park in the area for 25 years.

This major new scheme was designed with climate resilience at the centre of our approach. The street's mature trees have all been retained and are joined by an additional line of Amelanchier trees, which provide cooling and shade. Permeable resin paths absorb rainwater. Combined with the significant areas of planting where there was once none, this delivers a substantial new water catchment area. Planting is climate resilient, selected to withstand hot, dry summers.



Outcome 7: Existing public assets and services are adapted to help protect people from climate risks.

Actions

Increase the number of accessible "cool spaces" in Camden to provide respite to citizens during heatwaves.

Expand the network of drinking fountains and water refill stations across Camden with Thames Water and the Greater London Authority to help residents stay hydrated during periods of extreme heat.

Increase tree canopy cover throughout Camden to increase shade to protect residents during extreme heat events.

Work with Transport for London to ensure that public transport serving Camden, such as London buses and the Northern Line, are safe to use in the summer months.

Assess Camden-owned public amenities, such as playgrounds and street furniture, to ensure they are designed to be resilient to climate impacts and are safe to use during heatwaves.

Case Study: Cool Spaces and Drinking Fountains

The Greater London Authority (GLA) has collaborated with London boroughs, community groups, and faith-based and cultural organisations to establish a network of "cool spaces" throughout London. These indoor venues offer Londoners a refuge from the sun, a place to cool down, and an opportunity to rest on hot days, potentially reducing health risks associated with extreme heat.

Additionally, the GLA, in partnership with boroughs and Thames Water, has installed outdoor drinking fountains across London to help people stay cool and hydrated during hot weather. These fountains are available at more than 100 locations, including 10 in Camden. The cool spaces map also features these outdoor facilities, along with shaded areas, seating, and public toilets.

<https://apps.london.gov.uk/cool-spaces/>



Outcome 8: Camden's schools, hospitals and other social infrastructure are supported to build resilience to climate risks.

Actions

Further to the Climate Resilient Schools programme, work with other organisations such as the GLA and other local authorities to deliver further resilience-building projects across borough boundaries.

Seek funding for the implementation of recommended resilience-building measures in school climate adaptation plans (see case study below).

Engage with hospital trusts to facilitate the implementation of national guidance aimed at safeguarding service delivery during extreme weather events.

Promote cross-sector best practices as examples to enhance understanding of climate risks and strategies for building climate resilience.

Case Study: Climate Resilient Schools programme

The Climate Resilient Schools programme, a collaboration between the Greater London Authority (GLA), Department for Education (DfE), and Thames Water, focuses on helping London schools become climate resilient. Targeting the top 10% of vulnerable schools identified in the GLA's Climate Risk Mapping, the programme offers tailored climate adaptation plans (CAPs) to schools. These CAPs, were completed for three Camden schools (Hampstead School, Hawley Primary School, and UCL Academy), and offer guidance on how they can build their climate resilience through measures like sustainable drainage, flood protection, solar shading, and cooling.



4.4. Actions to protect Council services

Building climate resilience across Camden's own services will safeguard community wellbeing and ensure that we can fulfil our statutory and non-statutory responsibilities. All Council departments will need to assess and understand the risks posed by severe weather events to service delivery to ensure that service levels can be maintained.

Recent amendments to Camden Council's Constitution highlight our commitment to enhancing the natural environment and addressing the climate emergency. We will continue to assess decisions to ensure they have considered resilience and account for future climate risks.

Our Borough Emergency Control Centre plays a crucial role in disseminating weather warnings and guidance during severe weather events. We will work to enhance warning systems and collaborate closely with partners like Thames Water and the London Fire Brigade to integrate all climate risks into response plans.



Outcome 9: Council services understand how climate risks may affect service delivery and improve their resilience to the risk

Actions

Complete climate risk assessments across Council services and execute identified mitigation measures to enhance service resilience against future climate risks.

Promote available resources, including Camden's Environmental Stewardship course, and conduct training sessions for council officers and elected Members to build a better understanding of how to incorporate resilience measures into projects.

Continue to ensure that all Council decisions consider environmental implications, and document this through including an environmental implications section in all decision reports.

Case Study: Adult Social Care (ASC) – Updating practitioner guidance

In early 2023, a gap was identified in Camden's Adult Social Care's internal Practice Guide. The guide lacked information on assisting residents during hot weather and heatwaves. In response, guidance was developed to support staff in preparing for summer 2023. This resource ensures that accurate information and advice are provided to vulnerable residents and includes links to government guidance for carers and social care staff, as well as resources such as Camden's hot weather and heatwave website and the UK Health Security Agency's 'Beat the Heat' advice.

The infographic is titled 'Beat the Heat' and features the UK Health Security Agency logo. It is organized into four sections: 'Keep in touch', 'Keep well', 'Find somewhere cool', and 'Watch out'. Each section contains three icons with accompanying text. 'Keep in touch' includes icons for talking to people, listening to forecasts, and planning ahead. 'Keep well' includes icons for drinking fluids, wearing appropriate clothing, and slowing down. 'Find somewhere cool' includes icons for staying at home, going outdoors, and avoiding cars. 'Watch out' includes icons for watching for illness, cooling skin, staying safe in water, and getting help. A red banner at the bottom says 'For more information go to www.nhs.uk/heatwave'. At the very bottom, it says 'PHE publications gateway number: GOV-12085'.

Outcome 10: Camden has a robust emergency response approach for all foreseeable climate risks

Actions

Develop comprehensive emergency response plans for all identified climate hazards considering future risk. Collaborate closely with first responders and other essential stakeholders to establish a holistic approach.

Evaluate available external data sources for early notification of potential flash flooding and heat-related risks. When applicable, incorporate these sources into the procedures for risk notification from Camden's Emergency Control Centre.

Establish a streamlined process for sharing risk alerts between the Emergency Control Centre's risk warning system and communication team, who can direct appropriate warnings to residents.

Case Study: Borough Emergency Control Centre – Heatwave risk warning

Camden's Borough Emergency Control Centre (BECC) uses data from various sources, including the Met Office and the UK Health Security Agency, to identify areas in Camden at risk from severe weather events. The BECC recently adopted new heat-health risk alerts with three tiers: yellow, amber, and red, which provide weather forecasts and highlight health and care service impacts. These alerts are accompanied by action cards for different groups, offering risk assessment frameworks and guidance to protect vulnerable individuals during extreme heat events.

The infographic shows a map of the UK with a yellow alert level. It is titled 'Weather-Health Alerts Heat-Health Alerts' and includes the logos for UK Health Security Agency and Met Office. A text box says 'There is a yellow alert in the following regions: NI, WA, WM, SE, SW, W, and London. You need to act now between 16:00 and 18:00 on 12/06/2023'. Below the map, there are three colored buttons: 'There are currently no amber alerts' (orange) and 'There are currently no red alerts' (red). A text box below the map says 'Minor impacts are expected across the health and social care sector, including increased use of health care services by the vulnerable population in case of moderate average temperatures and increased potential for outdoor environments to become very warm.' Below this is a 'National Weather Outlook' section with a text box saying 'A fine period with a very good deal of sunshine, largely dry with light winds. High confidence for a very warm to hot period, with many places expected to see mild to high-20s throughout. Temperatures mostly increasing across most parts of the UK on Monday and Tuesday before reaching a peak on Wednesday and/or Thursday, with 17 or 22 very common or with this. Peak temperatures likely to be over 20°C on Friday but remaining very warm or hot for many places, particularly in towns and cities. Night time temperatures are warming, with a peak late on Wednesday night. Temperatures trending downward over the following days with probably strong advice average away from the west and northwest.' There are also sections for 'UK Health Security Agency' and 'Met Office' with links to 'Beat the Heat' and 'Weather-Health Alerts' respectively. At the bottom, it says 'UKHSA and the Met Office work together to coordinate health advice around heat for England. UKHSA heat alerts are aimed primarily at healthcare professionals and vulnerable groups. They are distinct from Met Office Extreme Heat Warnings for wider impacts on the general population across the UK.'

4.5. Actions to protect businesses, organisations and local economy

To enhance climate resilience throughout Camden and safeguard the local economy, businesses and organisations must gain a comprehensive understanding of the climate risks they face.

We will foster close collaboration with local organisations through the Camden Climate Alliance and local Business Improvement Districts to gain insights into how businesses are strengthening their resilience to climate risks. Where gaps exist, we will develop guidance to assist organisations in adapting to potential climate-related risks. Information sessions and workshops will be organised to support businesses as they assess their vulnerability and exposure to these risks.

Camden has the UK's seventh-largest economy, home to numerous major companies with headquarters within the borough. We will actively collaborate with organisations holding substantial assets to explore avenues through which they can contribute to community and school-based climate resilience initiatives.

We will engage with major landowners and other stakeholders, aiming to establish strategies for green infrastructure development across Camden. This approach will involve the formulation of collective strategies for improving the public realm and implementing green infrastructure projects. By successfully executing climate resilience projects, we will not only protect local businesses but also safeguard their employees from climate-related risks.

Outcome 11: Local businesses have a good understanding of climate risk and know how to improve their resilience.

Actions

Signpost businesses and organisations to toolkits that enable them to identify and enhance their resilience to climate risks.

Organise information events to help businesses build their resilience to a changing climate.

Promote information on climate resilience building through Business Improvement Districts (BIDs) to amplify the reach of Council communications on this issue.

Case Study: Camden Climate Alliance Workshops

In summer 2023, the Camden Climate Alliance (CCA), led by the Council, conducted two workshops aimed at informing local businesses about climate risks and fostering climate resilience planning. These workshops provided essential information, practical guidance, and resources to encourage businesses to assess their climate vulnerabilities and develop action plans to address them.



Outcome 12: The local economy supports green infrastructure investment across Camden.

Actions

Through the Camden Climate Alliance's Climate Connectors program, promote opportunities for large organisations to support resilience-building projects led by community groups and schools.

Utilise the Camden Climate Alliance's communication channels to promote the value of green infrastructure projects and share case studies of completed projects and their associated benefits.

Work with landowners, business, residents and other local stakeholders to deliver a strategy for delivering a green corridor in the south of Camden through the Holborn Liveable Neighbourhoods and Bloomsbury Vision project.

Case Study: Camden Climate Connectors – Rewilding UCL Academy

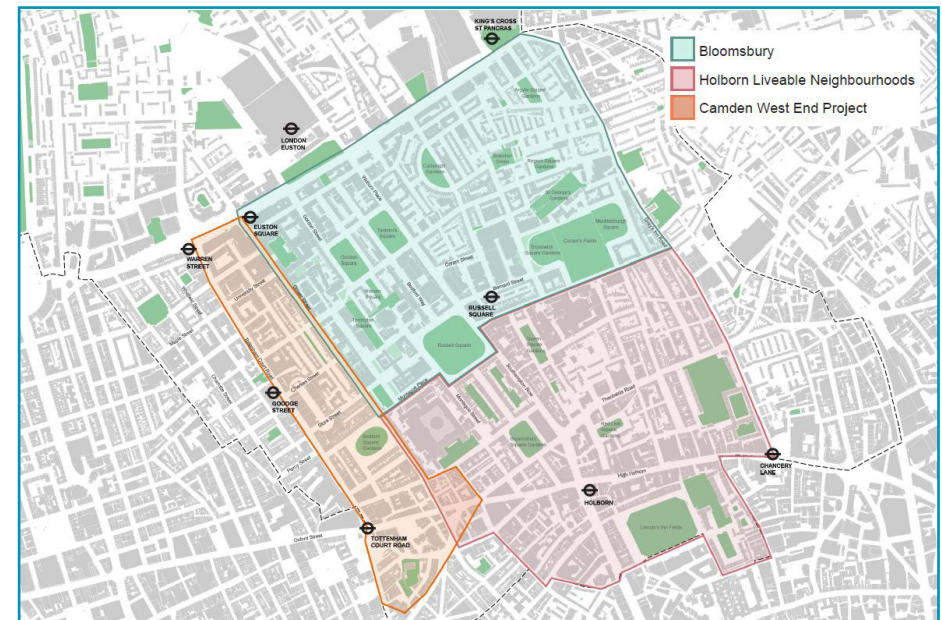
In autumn 2022, Camden Climate Connectors and Think and Do Camden partnered to deliver a rewilding module at University College London Academy. The project's objective was to empower students to design and rewild a section of their school grounds. Engaging students from year 7 to year 10, the initiative involved over 50 students who received training in rewilding and sustainability. Funding for this project was provided by Camden Climate Alliance members Doughty Street Chambers, and the KOKO Foundation, facilitated through the Climate Connectors program.



Case Study: Bloomsbury Vision

Camden Council, in collaboration with University of London, UCL, Birkbeck, the British Museum, and Bedford Estate, is developing the Bloomsbury Vision—a vision for a green, sustainable, safe, and interconnected public realm in Bloomsbury.

The Green Corridor vision is for the development of a pedestrian and cyclist-friendly network of green connections between open spaces, institutions, and transportation hubs south of Euston Road. This provides an opportunity for partnerships between local institutions, businesses, communities, and Camden. A dedicated steering group has been formed to engage with residents and local stakeholders, aiming to identify the area's priorities and explore potential funding sources for these projects.



4.6. Actions to protect nature and the environment



Safeguarding Camden's nature and environment from extreme weather events is essential for preserving biodiversity and maintaining space for nature within Camden.

To make Camden's Green Spaces resilient against hotter, drier summers, Camden will incorporate drought-resistant plants and swales and sustainable drainage systems to prevent waterlogging and flooding, which can harm habitats and the environment. We will also focus on increasing canopy cover and shading to provide shelter for both wildlife and residents.

Private green spaces in Camden, accessible to approximately 60% of households, will also need to adapt to combat climate risks. We will provide residents with guidance on drought-resistant planting and using their spaces to protect nature and mitigate climate-related hazards. In community-owned or managed green spaces, we will collaborate with local communities to fortify these areas against climate risks. We will encourage de-paving and turning the "grey to green" to support a nature network across Camden.

Outcome 13: Camden's Green spaces and other green infrastructure are resilient to a changing climate.

Actions

Develop a Green Infrastructure Strategy which sets out a borough-wide approach to the design, delivery, and maintenance of greening projects, integrating building the resilience of nature as a core guiding principal.

Utilise the Green Infrastructure Strategy to embed climate resilience into the design and planning of investment programmes including green spaces, transport, and Community Investment Programme projects.

Review green space maintenance regimes in response to climate risks and identify funding sources for ongoing maintenance of the increased areas of greening across Camden.

Increase tree canopy cover, promote diverse tree species, and prioritise planting that supports wildlife while preserving ancient and veteran trees.

Deliver the Biodiversity Action Plan to support nature to cope with the effects of climate change – enabling nature respond to severe weather events and to colonise new areas.

Case Study: Kilburn Grange Park Masterplan

The Council's Green Spaces team has partnered with residents and local stakeholders to refresh the Kilburn Grange Park masterplan, focusing on three key areas: Health & Wellbeing, Climate Resilience, and Community Support.

The updated masterplan integrates sustainable drainage elements within and around new play areas, including a dry swale to address waterlogging issues identified during past heavy rainfall. Additionally, permeable paving has been included across the park. The proposed planting strategy suggests climate resilience planting to ensure the survival of plants in changing climate conditions while optimising their functionality, such as rainwater retention benefits.



Case study: Fleet Valley Pocket Park

Construction of a new pocket park has been completed at Mount Pleasant close to Farringdon Road. This new pocket park comprises SuDS features (rain garden, tree pits and tree root cells) that have a storage volume of over 48m³. These new features are designed to capture surface water flow in an area that was previously completely paved over. The pocket park has replaced the previous impermeable pavement with permeable paving and surrounding vegetation. As well as providing water storage, the scheme has been designed to serve as a valuable public amenity in an area of London with limited green space and has been planted with drought-resistant species. The pocket park also provides new habitats in the area.



Outcome 14: Camden's community help to make private and community gardens more climate resilient.

Actions

Support community groups to share information about the cooling benefits of maintaining greening within front and back gardens, encouraging depaving and advice on drought resistant planting.

Form a Camden Nature Partnership to collectively execute the Biodiversity Strategy, with an emphasis on monitoring and boosting key priority species, as well as supporting community-led green space initiatives.

Establish a Nature Recovery Network for Camden, focusing on protecting, enhancing designated sites, and expanding green and blue corridors for habitat improvement and connectivity.

Encourage businesses and major landowners in Camden to install green infrastructure on their land and buildings (such as green roofs).

Case Study: Community Gardens in Camden

Camden is fortunate to have a number of community gardens which promote the importance of nature and the environment, offering engaging educational opportunities for people to get involved in. Community gardens increase biodiversity in urban areas, provide habitats for a variety of plants and animals, and introduce plants encourages pollination, supporting the local ecosystem.



Case Study: Wild Bloomsbury

Led by University College London working with the University of London, Wild Bloomsbury is making nature-based interventions to improve wellbeing, increase climate-resilience and reduce pollution, to create healthy and liveable cities. Working with students, staff, local people, organisations and researchers, their goal is to create a vibrant and liveable Bloomsbury by reintroducing nature and make 10,000m² more biodiverse space by 2024 and increase health and wellbeing.

<https://www.ucl.ac.uk/sustainable/what-ucl-does/sustainable-campaigns/wild-bloomsbury>



Case study: Think & Do and Camden Forest – Communi-Trees

Communi-Trees aims to empower local young people, known as the Camden Foresters, to look after trees planted on Camden estates and other privately owned land, whilst gaining employment and skills. The project is a part of the Camden Forest initiative, which aims to plant 2025 trees across the borough by 2025.

The project is supported by the KOKO Foundation and led by a group of committed local volunteers. To view a map of trees planted through the project, [visit https://camdenforest2025.wordpress.com/map-of-trees/](https://camdenforest2025.wordpress.com/map-of-trees/)



5. Monitoring and reporting

We understand that the climate crisis is impacting Camden communities today and this action plan focuses on the development of projects which will help to immediately tackle some of these challenges. We also acknowledge that as the climate crisis worsens, climate hazards will increase, and we need to prepare for more extreme climate events.

This Climate Adaptation and Resilience Plan (2023 - 2025) will support the development of our understanding of climate risks across all sectors in Camden and will support the development of a long-term approach to building climate resilience in Camden based on future expected climate risks.

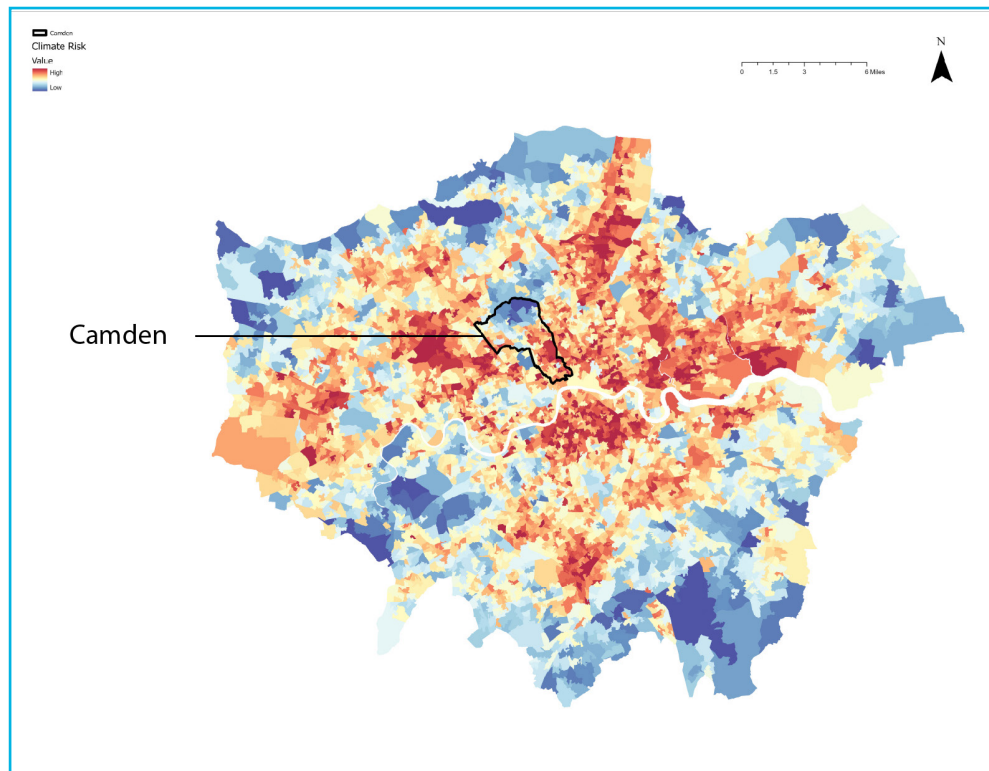
The Climate Adaptation and Resilience Plan will be delivered alongside the Climate Action Plan (2020-2025), to deliver a holistic approach to tackling the climate crisis as well as protecting Camden against the increasing risk that the climate crisis presents. To unify this approach, the Council's approach to adaptation and resilience will be incorporated into the next Climate Action Plan.

Delivery under the Climate Adaptation and Resilience Plan will be monitored annually through the review process for the Climate Action Plan. The next annual review will be published in Autumn 2024. The review will provide an update on work across the 14 action plan outcomes and will be assigned a status update in line with the Climate Action Plan annual review approach.

Appendix 1 – Climate Risk Mapping

The GLA partnered with Bloomberg Associates to create the Climate Risk Maps, a series of London-wide maps that overlay key metrics to identify areas that are most exposed to climate impacts with high concentrations of vulnerable populations. The three maps include an Overall Climate Risk map (using 13 environmental and socio-economic metrics), a Flood Risk map (using 9 flood-related and socio-economic metrics), and a Heat Risk map (using 11 heat-related and socio-economic metrics). The maps combine data from both publicly available and privately licensed sources and are aggregated to London's LSOA boundaries, informing viewers of climate risks faced within each borough at the smallest census geography possible. Bloomberg Associates worked with Camden Council to produce maps that specifically highlight the borough's overall climate, heat, and flood risk.

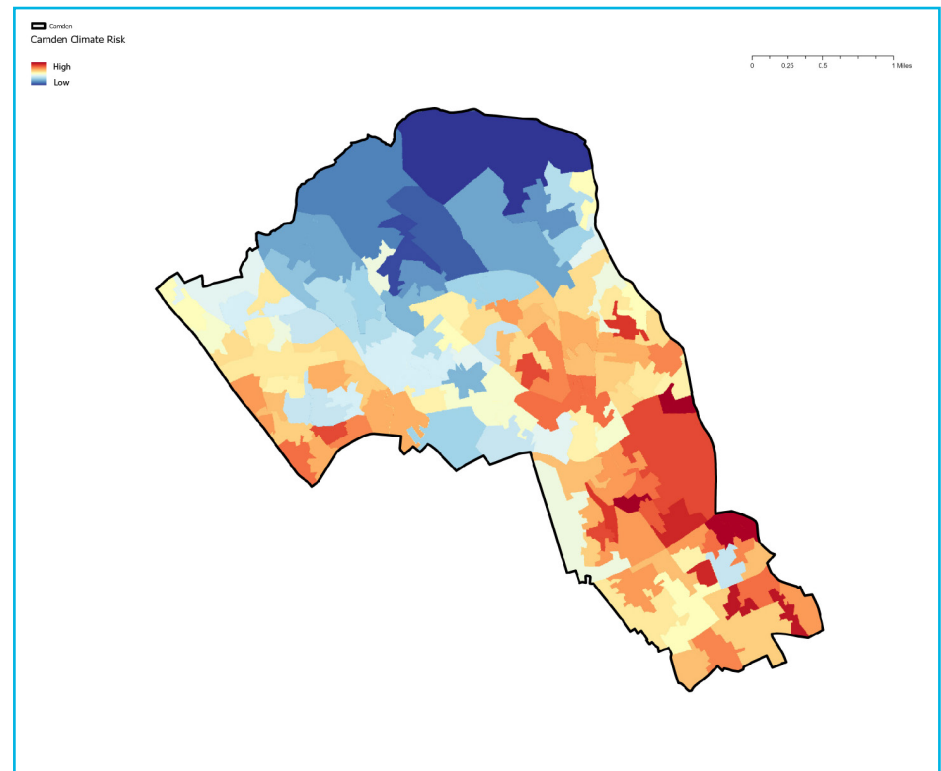
Heat Risk – London



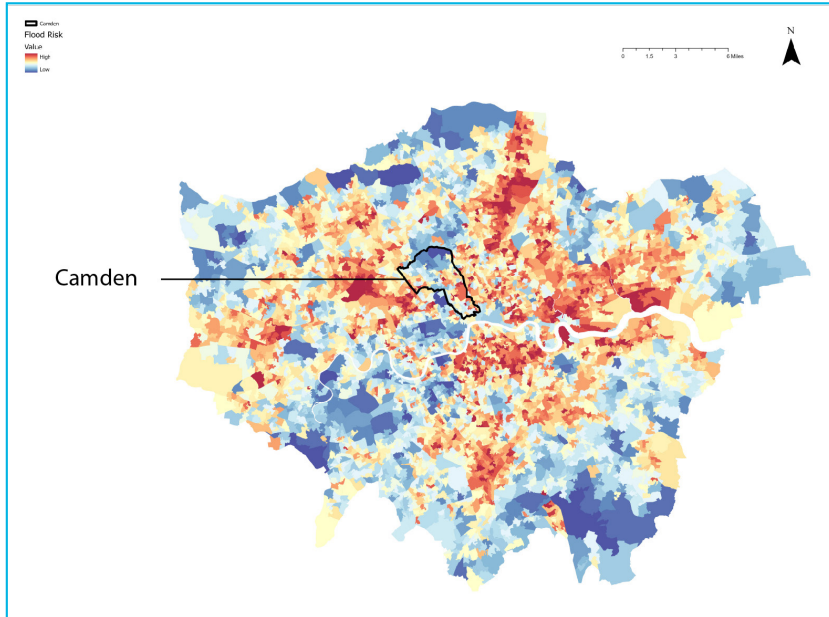
The symbology used for the Climate Risk maps highlights areas with “low” to “high” risk scores across London using a sliding colour scale. All risk scores are relative to each other; blue indicate areas with lower risk, and red indicate areas with higher risk. The minimum and maximum scores vary for each map, as the set of metric input layers vary for each map. It is important to note that these scores have not been normalized or manipulated to hold significant meaning on their own. Raw scores have not been shared publicly; when taken out of context, the scores may be more confusing than helpful.

To view the full maps and methodology, please visit: <https://data.london.gov.uk/dataset/climate-risk-mapping>

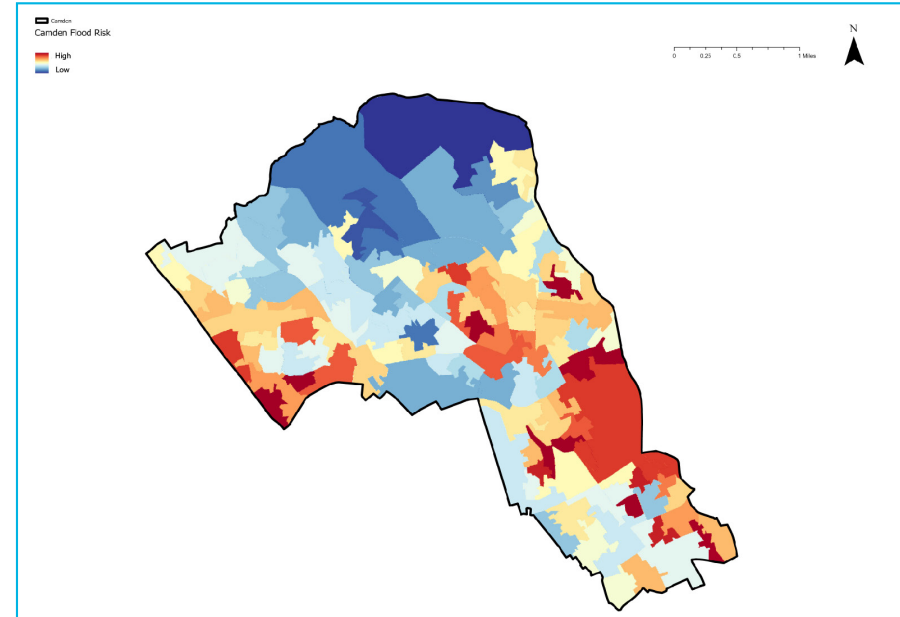
Heat Risk – Camden



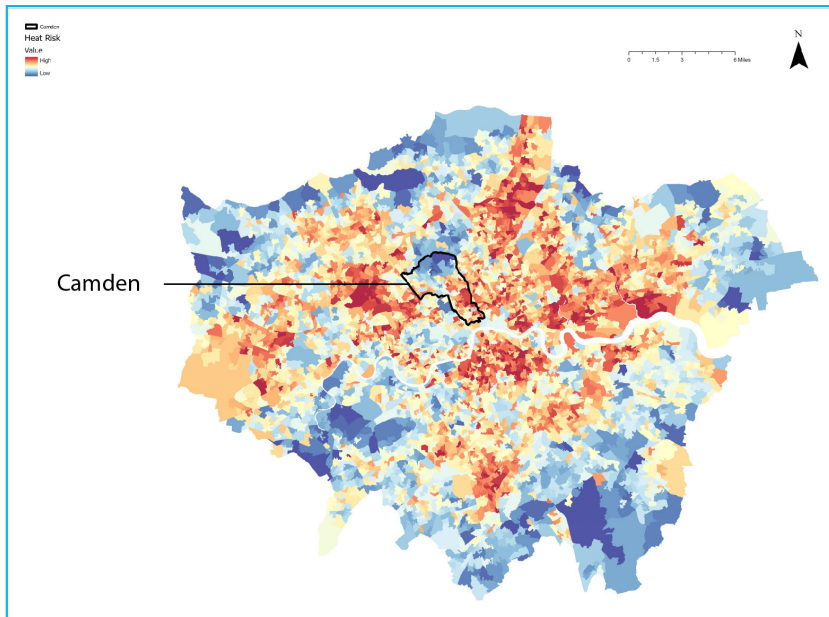
Flood Risk – London



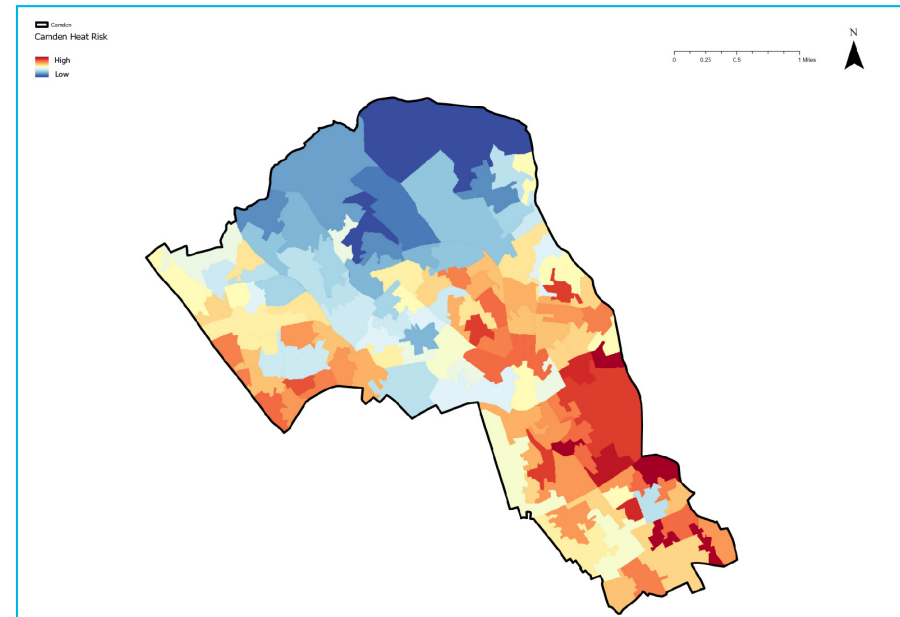
Flood Risk – Camden



Overall Climate Risk – London



Overall Climate Risk – Camden



CONTACT DETAILS

Sustainability, Air Quality and Energy

London Borough of Camden

5 Pancras Square London

N1C 4AG

greencamden@camden.gov.uk

**TACKLING THE
CLIMATE
CRISIS**