Cool Neighbourhoods Strategy

2025

Fairer Environment

City of Westminster

Contents

> *By taking bold, targeted action now, we can create a Fairer Environment where everyone, particularly those most vulnerable, can thrive despite the challenges of a changing climate.*
>
> Cllr Ryan Jude

Foreword

As Westminster faces the growing challenge of extreme heat, our commitment to creating a Fairer Westminster means acting now to ensure all communities are protected.

By building climate resilience, we can provide a safer, healthier environment for everyone, particularly those most vulnerable to the effects of heat.

Extreme heat is no longer a distant climate risk, it's here now, and it's already reshaping the way we live and work in our cities. In the summer of 2022, London experienced temperatures over 40°C for the first time, with Westminster's own St James's Park recording one of the highest. This marked a turning point. The climate is changing fast, and urban areas like Westminster are on the frontline.

As one of the most densely built and diverse areas in the country, Westminster faces unique challenges from a warming climate. But we also have the tools, creativity and commitment to lead the way in responding. From overheated homes and workplaces to streets and public spaces that offer no shade or respite, we must act now to protect our residents, communities and environment from the growing impacts of extreme heat.

We are acutely aware that the effects of extreme heat are not felt equally. Vulnerable groups, including low-income households, the elderly, people with underlying health conditions, and those living in poorly insulated or overcrowded housing, are disproportionately at risk. This highlights the importance of ensuring that the solutions we put forward do not just address the physical environment but also tackle the inequalities that climate change exacerbates.

That's why we've developed the Cool Neighbourhoods Strategy, our first-ever plan to help Westminster adapt to rising temperatures. This strategy brings together practical, people-focussed actions that will improve comfort and safety in buildings, cool the public realm through greener design, and build community resilience to help residents stay well during hot weather.

By taking bold, targeted action now, we can create a Fairer Environment where everyone, particularly those most vulnerable, can thrive despite the challenges of a changing climate. This strategy ensures that Westminster remains a city that not only withstands extreme heat but creates spaces where people and nature can flourish together.

Councillor Ryan Jude

Cabinet Member for Climate, Ecology, Culture and Air Quality

> *Tackling extreme heat is essential not just for our environment but for ensuring equal access to safe, comfortable spaces for every resident. Together we can build a city that thrives, no matter the climate challenges ahead.*
>
> Cllr Ryan Jude

Executive Summary

Westminster is on a mission to become a greener, fairer, and more climate-resilient city.

In 2019, Westminster City Council declared a climate emergency, committing to net zero carbon emissions from council operations by 2030 and across the city by 2040.

In 2023, the council declared an ecological emergency, recognising the devastating impact of climate change and urban development on the city's nature and biodiversity. As one of the UK's most densely populated and built-up areas, Westminster plays a crucial role in the collective effort to protect the city from the growing risks of climate change.

Extreme heat is one of the most urgent and immediate climate threats facing Westminster. The UK experienced five heatwave periods during summer 2022 with London recording a record-breaking temperature of 40.2°C in Westminster's St. James Park. The extreme heat of summer 2022 was not an isolated event, but part of an ongoing warming trend, with similar intense heatwaves expected to become more frequent as the climate changes. Without action, by 2080, summer temperatures in Westminster could rise by up to 4.5°C, significantly increasing risks to public health, infrastructure and essential services. Without intervention, London is forecasted to experience summer 2022-style heatwaves every year. Healthcare, housing, the local economy and the natural environment will be under dangerous strain with heatwaves becoming longer, more intense and more frequent. Westminster is taking steps to learn from the experience of the summer 2022 heatwaves and ensure the city is better prepared for extreme heat in the future.

This challenge is not felt equally across the city. Some neighbourhoods, particularly those with high-density housing, fewer green spaces, and inadequate buildings, are far more vulnerable to extreme heat than others. Meanwhile, low-income communities, people with underlying health conditions and disabilities and renters face additional barriers to staying cool, from poor quality housing to limited access to green spaces and air conditioning.

Westminster is already taking ambitious steps to build resilience to climate change, but more must be done. Cool Neighbourhoods is Westminster's strategy to prepare, protect, and future-proof the city against rising temperatures. This strategy sets out 16 targeted actions under three key pillars:

Cool Buildings

Helping people stay cool in their homes and public buildings.

Cool Places

Helping people stay cool outside in the public realm.

Cool Communities

Helping people know how to stay cool by building their adaptive capacity.

This strategy is designed for those with the influence and capacity to act, including local organisations, businesses, service providers and community groups, as well as anyone interested in how Westminster is preparing for rising temperatures. It serves as both a call to action and a shared plan to ensure Westminster remains a world-class, climate ready city, where all people, organisations, and nature can thrive in a changing climate.

Heat Risks in Westminster

In 2024, Westminster City Council commissioned consultants Arup to conduct a Climate Risk & Vulnerability Assessment (CRVA) to better understand the local impacts of climate change.

The CRVA provides a comprehensive, evidence-based analysis of Westminster's exposure to various climate hazards, identifying where risks are greatest and which communities are most vulnerable.

The findings of the CRVA have directly shaped the Cool Neighbourhoods Strategy, ensuring Westminster takes targeted, proactive action to protect residents, businesses and infrastructure from rising temperatures.

Westminster has experienced extreme heatwaves in recent years, leading to the UK Health Security Agency (UK HSA) and the Met Office to issue the first ever Level 4 Heat-Health Alert. These rising temperatures will impact multiple aspects of life in Westminster:

Health and Wellbeing

Overheating in homes, workplaces, and public spaces will worsen respiratory and cardiovascular conditions and increase heat-related hospital admissions.

Westminster residents have expressed impacts to their sleep, stress, mental health and productivity as a result of extreme heat. Extreme heat can also have significant impacts on the delivery of health and social care by placing increased demand on hospitals, clinics and home-based care providers.

Council-run services such as adult social care or housing may also experience strain, particularly in supporting vulnerable residents during heatwaves. Hot classrooms can also lead to reduced focus, fatigue, and ill health.

A recent study found 78% of schools in London are already experiencing significant adverse heatwave-related impacts to students' learning, productivity or behaviour[1].

The **summer 2022** heat periods were associated with

2,985

excess deaths in England.

Natural Environment

Extreme heat threatens both Westminster's green spaces and freshwater habitats. Parks and gardens face water scarcity, with soil and vegetation drying out, and trees can suffer from heat stress, potentially leading to tree loss. The risk of wildfires increases in dry, grassy areas. In July 2022, the London Fire Brigade declared a Major Incident due to pan-London incidents of grass and wildfires, leading to their busiest day since World War II[2]. Green spaces, which usually provide cooling benefits and improve air quality, struggle to do so in extreme heat, and biodiversity may decline as certain species fail to adapt. Similarly, high temperatures worsen eutrophication, a process where excess nutrients, often from pollution, lead to overgrowth of algae in ponds, lakes, and canals. These algae block sunlight and deplete oxygen, creating "dead zones" where aquatic life can't survive. For example, in 2021, the Serpentine and in 2013, the Paddington Canal, experienced these blooms. Warmer air temperatures also worsen air quality, with the July 2022 heatwaves recording significant increases in ground-layer ozone pollution as well as small particle pollution in the UK[3]. The deterioration of air quality leads to increased health risks, particularly for people with existing respiratory conditions.

Built Environment

More than half of UK homes are at risk of overheating, with London facing particularly high exposure[4]. In Westminster, the challenge is even greater due to its historic, high-density buildings, many of which were never designed to withstand extreme heat. Factors such as overcrowding, building type, and barriers to opening windows, such as noise, air pollution and safety concerns, further increase vulnerability. Westminster's unique built environment adds another layer of complexity. With over 11,000 listed buildings and 78% of the city designated as conservation areas, the highest of any UK local authority, retrofitting for climate resilience is complicated by the need to preserve historic character[5]. Beyond homes, Westminster's public and commercial buildings also face increasing risks from rising temperatures. Leisure centres, libraries, and places of worship, which often serve as cooling refuges, are also vulnerable. Council-managed facilities may need investment for retrofitting to ensure they remain safe and functional during periods of extreme heat. Westminster's cultural sector, including theatres, museums, and galleries, faces similar challenges. Overheating can reduce visitor numbers, threaten collections, and create unsafe working conditions for staff[6].

Energy

Extreme heat can put pressure on energy and communication networks, leading to disruptions, and making it harder to produce and deliver power efficiently. This increases the risk of power cuts, especially as more people and businesses rely on air conditioning to stay cool. Underground infrastructure, including electricity, gas, and water pipes, can be damaged when the ground dries and shrinks in extreme heat. Increased energy demand can also cause 'brown outs', temporary drops in power, disrupting key services such as trains and internet access. Council operations, particularly IT-dependent services, may also face disruption from overheating equipment or energy shortages, affecting both internal service delivery and public contact centres.

Business and Economy

High temperatures can reduce productivity across all industries due to heat exhaustion, worsened health conditions, poor sleep, and mental health impacts. Transport disruptions caused by heat-related infrastructure failures can also make commuting more difficult. Outdoor workers, including council staff in waste and landscape management, are especially vulnerable. Heatwaves can also disrupt Westminster's many outdoor cultural and sporting events. These events attract tens of thousands of visitors, and extreme heat can pose health risks to attendees, staff, and performers while straining emergency services.
Future extreme heat events can impact Westminster's local economy, with changes to footfall and spending behaviour during the hottest three days of the July 2022 heatwave contributing to a 32% decline in average spending throughout the City.

During the hottest three days of the **July 2022 heatwave** Westminster received

165,000

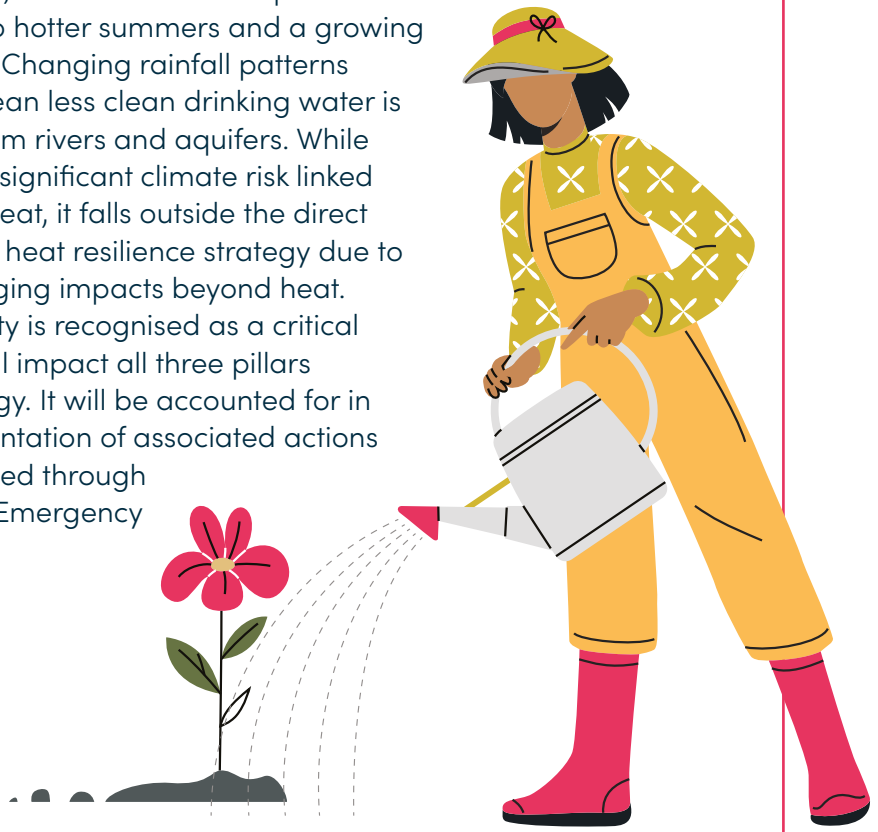
less visitors daily.

Transport

Extreme heat is a growing challenge for Westminster's roads and public transport. The number of days where temperatures could melt road surfaces is expected to double under a 2°C warming scenario and nearly quadruple under 4°C, increasing risks of road damage and disruption[7]. Public transport is also at risk, with rail tracks buckling, speed restrictions, and delays becoming more common in high temperatures. The London Underground, with its deep tunnels and limited ventilation, is particularly vulnerable, raising concerns about passenger safety during heatwaves. These disruptions have knock-on effects, slowing commutes, impacting businesses, and delaying emergency response times. During the 2022 heatwave, some Westminster residents reported avoiding the Underground altogether, while others reconsidered cycling in extreme heat.

Water Scarcity

Rising temperatures and longer dry spells will put increasing pressure on water supplies. During the July 2022 heatwave, Thames Water reported a 50% increase in water use, with reservoirs at their lowest levels in 30 years[8]. Westminster is in a seriously water-stressed region, and the risk of severe drought is expected to increase. By 2050, London's public water supply could face a shortfall of 1 billion litres per day, while demand is expected to rise due to hotter summers and a growing population[9]. Changing rainfall patterns may also mean less clean drinking water is available from rivers and aquifers. While drought is a significant climate risk linked to extreme heat, it falls outside the direct scope of this heat resilience strategy due to its wide-ranging impacts beyond heat. Water scarcity is recognised as a critical issue that will impact all three pillars of this strategy. It will be accounted for in the implementation of associated actions and addressed through the Climate Emergency Action Plan.



Council Services

Extreme heat poses a growing risk to the delivery, resilience and reliability of council services. Many frontline operations, such as adult social care, housing support, waste management, and cleansing services, involve outdoor work or high levels of public interaction, making them more vulnerable to heat-related impacts. In addition, office-based and IT-dependent services may face disruption from overheating equipment or energy shortages affecting service delivery and public contact centres. To maintain service quality and staff safety, Westminster must ensure robust business continuity controls are in place to ensure that essential services can continue to function during and after periods of extreme heat.

Temperatures in St James' Park broke city record-high temperatures, reaching

40.2°C

By 2050, extremely hot days (above **30°C**) in the UK could

double in frequency

By 2080, average summer temperatures in Westminster could increase by up to

4.5°C

under a 4°C warming scenario)

What is the urban heat island?

The urban heat island is when urban areas experience a warmer surface and air temperature than their rural neighbours.

In London, central areas are approximately 4.5°C degrees hotter than the surrounding green belt on average[10]. How cities are designed and developed creates an urban heat island in many ways:

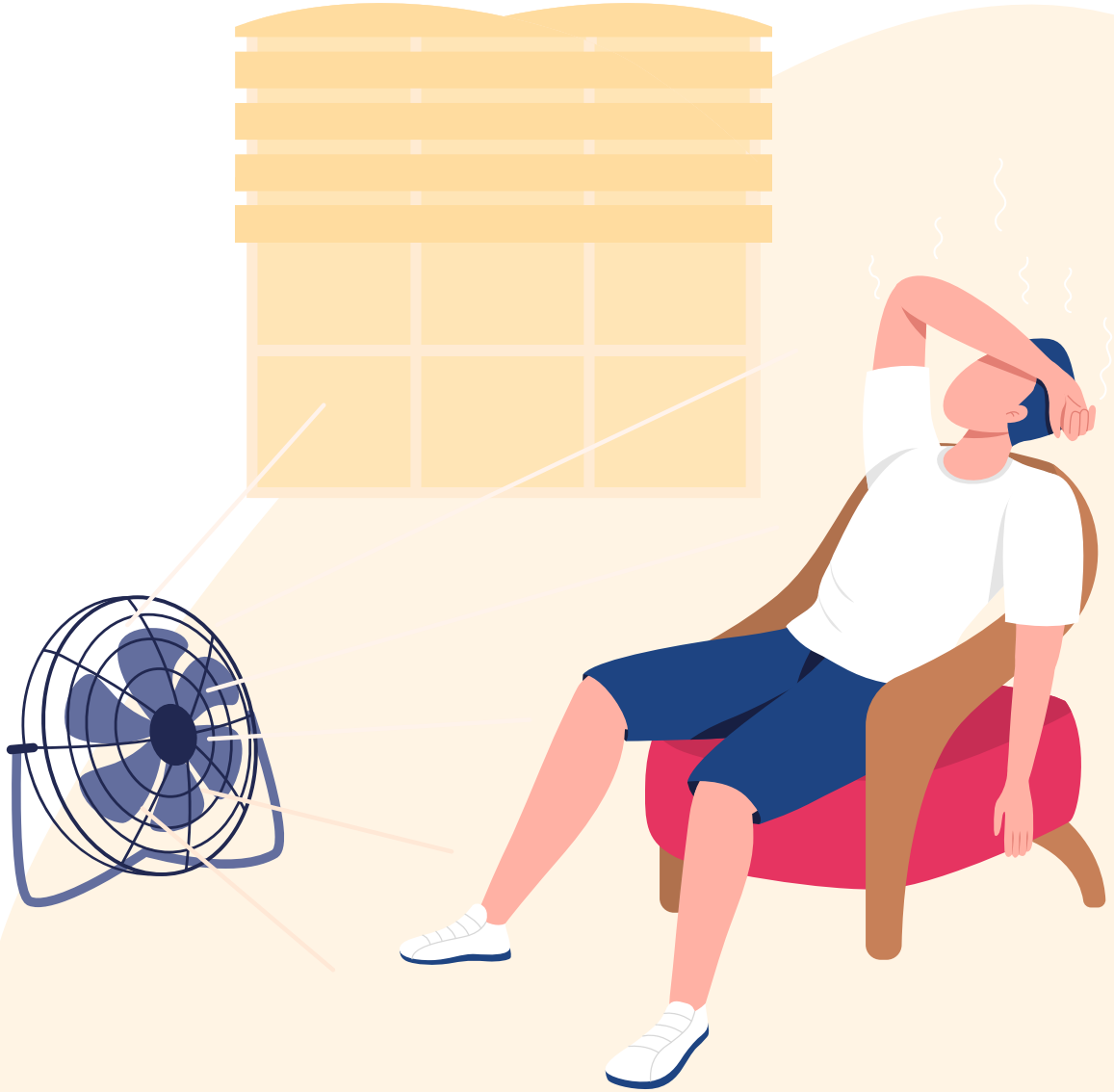
- A higher portion of walls, roofs and ground areas covered in hard materials like concrete and asphalt, which absorb heat from the sun during the day and release it back into the air, making the area feel hotter.
- There's less greenery and water bodies that naturally cool the air by providing shade and releasing moisture.
- The crowded layout of cities can reduce airflow, trapping heat and preventing it from escaping into the atmosphere.
- Cities also generate heat from various sources, like car exhaust, factories, air conditioning units, and underground systems, which all add to the local heat and make it feel even warmer for residents.

Disproportionate Impacts

Extreme heat does not impact all communities equally. In Westminster, social deprivation, housing conditions, socio-economic and environmental factors combine to make certain areas, and the people living in them, far more vulnerable to rising temperatures.

Residents with lower incomes, limited access to green space, and poorer-quality housing have fewer resources to adapt to extreme heat and are at greater risk of heat-related illness.

To build a Fairer Environment, we need to understand how climate change and environmental pressures affect different communities. Westminster's *Environmental Justice Measure* brings together local data on social conditions and environmental risk, enabling the Council to identify where need is greatest and take targeted action. North Paddington, which includes the Harrow Road, Queen's Park, and Westbourne wards, is one of Westminster's most climate-vulnerable areas. This part of Westminster has some of the highest levels of social deprivation, the lowest tree canopy cover, and the greatest exposure to urban heat island effects.



Heat Risk

Ward Boundaries 2022

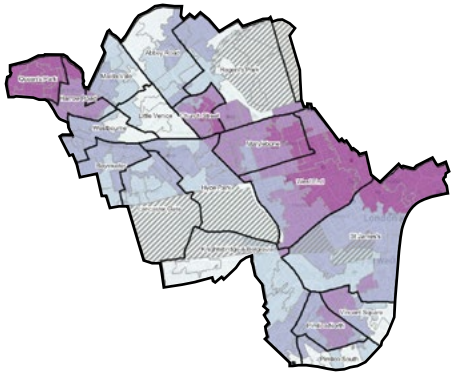
Royal Parks

Heat Risk

Score

Cooler

Hotter



Heat risk identifies the hottest parts of Westminster in the height of summer, when adverse health impacts are at their most severe. Understanding heat risk supports Westminster's climate adaptation projects and informs how we work with other London boroughs and national government.

Tree Canopy Cover

Ward Boundaries 2022

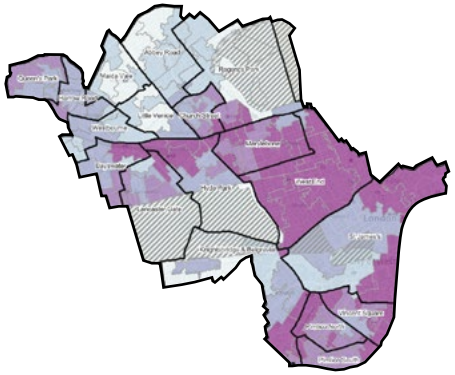
Royal Parks

Tree Canopy

Score

More

Less



Higher tree canopy cover and greenery can cool street surface temperatures by up to 8.7 °C[13]**.** To help mitigate the impacts of hotter summers, it is important to identify the areas where there are fewer trees and help inform where future planting could take place. 16.17% of Westminster is covered by urban tree canopy cover, while for London as a whole and the U.K. that percentage is 21% and 16% respectively.

Deprivation

Ward Boundaries 2022

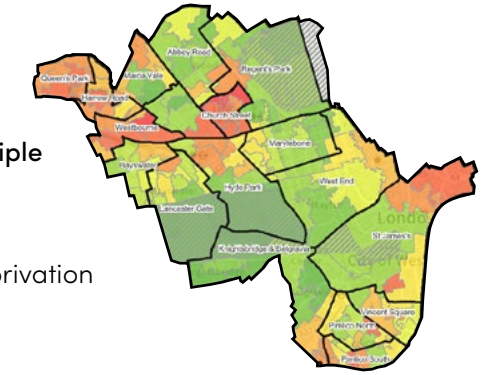
Royal Parks

Index of Multiple Deprivation

IMD Decils

Less deprivation

Most deprivation



The Index of Multiple Deprivation (IMD) has been included to consider the socio-economic disparities in the borough. It covers factors of income, employment, education, health, crime, barriers to housing and services, and living environment. Based on the rank of its average IMD score, Westminster is the 19th most deprived of the 33 London boroughs.

LIMITED GREEN SPACES AND LOW TREE COVER

There is **significantly less shade** and fewer natural **cooling benefits** compared to more affluent areas.

HIGHER LEVELS OF DEPRIVATION

39% of older adults in Westminster experience **social deprivation**, and low-income households often **lack access** to air conditioning or the **ability to adapt** their homes for cooling[11].

OVERCROWDED HOUSING

10% of Westminster's households are overcrowded, further increasing **heat exposure indoors**[12].

HOUSING INSECURITY

71% of Westminster's households are **rented**, meaning many tenants **cannot make** structural improvements like shading or insulation[12].

DISPROPORTIONATE IMPACT ON GLOBAL MAJORITY COMMUNITIES

People of a global majority background in Westminster are **four times more likely** than white residents to live in **high-risk** heat areas (CRVA).

PEOPLE WITH LONG-TERM HEALTH PROBLEMS OR DISABILITIES

Harrow Road **(26.2%)**, Queen's Park **(30.3%)** and Westbourne **(27.9%)** all have a **significantly higher** portion of households with a **long-term** health problem or disability, compared to the Westminster average **(20.2%)**. Queens Park also the highest rate of **anxiety** in the borough, at **126.9** in **1000** people.

Existing Local Strategies & Action Planning

Westminster City Council has already taken significant steps to address climate risks through a range of strategies and action plans.

Due to the multi-faceted nature of climate risks, multiple teams across the Council are actively working on climate adaptation and resilience, each focusing on different aspects of mitigation, preparedness, and response.

The Cool Neighbourhoods Strategy builds on this existing work, complementing ongoing efforts by introducing targeted measures to increase Westminster's resilience to extreme heat. Key existing strategies include:

1 Climate Emergency Action Plan

The extreme temperatures experienced during the July 2022 heatwave were made 10 times more likely by climate change.

According to the Met Office, UK summers reaching over 40°C currently occur once every 100 to 300 years, but without significant action to reduce greenhouse gas emissions, these events could occur as often as every 3.5 years by 2100[13].

These projections highlight the urgent need for both mitigation and adaptation strategies to reduce emissions to limit future climate change, while also preparing for its inevitable impacts. In recognition of this, Westminster declared a climate emergency in 2019, committing to net zero emissions from council operations by 2030 and borough-wide net zero by 2040. Westminster City Council's Climate Emergency Action Plan, first published in 2021, sets out a vision for achieving emissions reduction, while also safeguarding the city from current and future climate impacts.

The plan reflects the council's growing understanding and commitment to addressing climate challenges, continuously evolving to incorporate new insights, including those from the Climate Risk and Vulnerability Assessment (CRVA). Recognising that climate risks do not impact everyone equally; greater emphasis has been placed on environmental justice and addressing vulnerability to ensure actions are inclusive and equitable. While the plan takes a holistic all-hazards approach to climate resilience, Cool Neighbourhoods Strategy focuses specifically on to adapting Westminster to extreme heat.

2 Greening and Biodiversity Strategy

Urban greening plays a crucial role in mitigating the urban heat island effect, improving air quality and enhancing Westminster's overall climate resilience.

In 2023, Westminster conducted a *Green Infrastructure Audit*, which assessed existing green spaces and identified opportunities for expanding green and blue infrastructure across the city. The assessment informed the development of a *Greening & Biodiversity Strategy* which sets out measures to improve the sustainability and resilience of the city through enhancing the natural environment.

3 Local Flood Risk Management Strategy

Westminster City Council is a Lead Local Flood Authority (LLFA), as designated by the Flood & Water Management Act 2010, and is responsible for managing flooding in the borough from ordinary watercourses, groundwater and surface water.

Part of our duties as an LLFA requires us to develop, deliver and monitor a Local Flood Risk Management Strategy (LFRMS). The existing LFRMS is for the period of 2024–2030 and outlines how Westminster will work with other Risk Management Authorities, such as the Environment Agency and Thames Water, to manage flooding across Westminster. A significant element of the LFRMS commits the Council to delivering Sustainable Drainage Solutions (SuDS), which will support the ambitions of the Cool Neighbourhoods Strategy.

4 Emergency Preparedness and Response

The Cool Neighbourhoods Strategy is a long-term adaptation strategy that complements the robust emergency planning procedures the Council already has in place to respond to extreme weather events.

The Council's Resilience Team leads on emergency preparedness efforts, working in collaboration with emergency services and key stakeholders to manage extreme weather events. The Borough Risk Register provides a comprehensive assessment of risks that could affect Westminster, including heatwaves. The Adverse Weather and Health Plan and Severe Weather Emergency Protocol (SWEP) also provide preparedness and response arrangements. These emergency planning measures ensure that Westminster can respond effectively to immediate climate threats whilst ensuring that Cool Neighbourhoods provides a pathway for long-term resilience.

5 Supplementary Planning Documents

Westminster City Council guides sustainable built environment development in the borough through our City Plan and supplementary guidance documents for developers to adhere to.

We have recently reviewed our Environmental Supplementary Planning Document to include a new sub-chapter on heat risk in Westminster, outlining design and development solutions to reduce this risk for property owners, tenants, visitors and workers in the borough. This new chapter strongly supports the outcomes listed in the Cool Neighbourhoods Strategy.

The Cool Neighbourhoods Strategy enhances Westminster's climate adaptation planning by specifically addressing extreme heat risks. It complements Westminster's climate mitigation, flood management, and emergency preparedness strategies, ensuring that the borough is ready for a warmer future while continuing to build resilience across all areas of policy, planning, and response.

Putting Communities at the Heart of Cooler Neighbourhoods

The people of Westminster are at the heart of this strategy.

We know residents, visitors and businesses have unique lived experiences in how they are impacted by extreme heat and how they take action to cope.

With this in mind, we conducted a series of deep engagement activities to ensure that the perspectives and experiences of the people in Westminster are central to our response. The feedback received from the community has directly shaped this strategy.

February 2024

Citizen's Climate Action Committee

We hosted 30 residents, as part of Westminster's Citizen's Climate Action Committee, to take part in a workshop and provide feedback on the locations in Westminster which are most vulnerable to extreme weather events and how extreme weather affects their daily lives. This feedback directly informed our Climate Risk and Vulnerability Assessment.

July 2024

Stakeholder roundtable

We established a roundtable of 17 experts who represented important stakeholders in Westminster for adaptation and resilience. This included community organisations, local & regional authorities, business improvement districts, and subject-matter experts. The roundtable discussed shared challenges and opportunities for businesses and communities and identified key priorities for action.

July 2024

Resident focus groups

We ran focus groups with 25 Westminster residents to understand their lived experiences, evaluate community support structures, and assess their communication needs and preferences regarding climate risks. These sessions covered multiple climate hazards and during the session, reoccurring feedback was that the community felt particularly ill-prepared for heat. Extreme heat was already having real impacts on the lives of residents, yet they felt unable to address it, unlike cold, rain and storms.

Summer 2024

Surveying Westminster businesses

We surveyed Westminster businesses, big and small, to understand how climate change was currently impacting their business and what they were doing to adapt. 36 businesses from a wide variety of industries responded, and feedback overwhelmingly focused on anxieties about the increasing prevalence of heatwaves and flooding. There was a mixed variety of action-taking, with a third of businesses not currently considering climate in their organisational risk planning.

Co-designing solutions with Westminster's vulnerable communities

Recognising that extreme heat is a growing issue that affects some community members more than others, the Council facilitated a full day workshop with 37 participants, including residents and community groups that represented demographics and areas that are most at-risk.

The workshop co-produced solutions for a heat resilient Westminster, with common themes listed below. Under these broad themes, residents also brainstormed specific actions and projects. These themes are captured under the pillars of the Cool Neighbourhoods Strategy and ideas from this session have directly informed the outcomes and actions.

More greenery and nature

More and improved water infrastructure

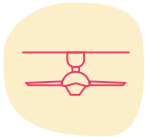
Cool and shaded active travel routes and public transport infrastructure

Free public amenities and services for cooling

Outdoor public spaces that are shaded, accessible, bustling and safe

Indoor public spaces that are accessible and safe to shelter from heat

Improved communications and engagement about what to do in extreme heat, and how to prepare



Well shaded, ventilated and cool buildings

Productive partnerships and community decision-making

What's next

As we begin to implement the Cool Neighbourhoods Strategy, partnerships will be crucial to delivering tangible outcomes in Westminster.

While Westminster City Council plays a central role in driving heat preparedness across the borough, we recognise the ambitions of the strategy cannot be realised by the Council alone. We will continue to engage with the networks we have established during the development of the strategy, and in addition, collaborate with research institutions, healthcare providers, community organisations, faith leaders, local businesses and other public service institutions. Through these partnerships, we aim to improve the resilience of the City and its communities and share the learnings of heat resilience across Westminster and beyond.

How heat impacts the people of Westminster

Through engagement with the community, we built a comprehensive understanding of how the people of Westminster experience extreme heat.

Those most vulnerable to extreme heat reported common themes such as:

Extreme heat affects both physical and mental health, with particular concern for the impacts on sleep and people with disabilities, pre-existing health conditions, the elderly and young children.

I bet that's probably when it was nice to be in the basement because I was in the attic roasting my life away. I felt like I was in the oven, like a chicken.

Unlike the rain and cold, understanding of how to avoid the heat and cool down is low, with people feeling 'helpless' during extreme heat.

I don't think we're very well prepared for heat and that showed last time we had heat before, people were doing snap responses... but they didn't know the basics.

Local buildings and homes, particularly flats and top-floor properties, are not prepared for extreme heat and in some instances were becoming hotter than the outside temperature.

It's not healthy to be living in these high stressful situations. Extreme weather causes extreme stress on people.

Parents felt that schools were unable to manage in hot conditions, impacting children's education and learning.

My son's school didn't have air con and they would come out literally sweating from school. Their face is completely red. And I was thinking, how did they even learn?

Public spaces and services, and in particular public transport, were not well equipped in the heat.

The tube is awful because, of course, you've got the humidity as well.

There's no shade in the park

Our Vision

Our ambition is to build a more just, equitable, and heat-resilient city, while protecting the health and safety of all people who live, work and visit Westminster.

As extreme heat becomes more frequent and intense, Westminster must take bold action to ensure that homes, public spaces, and communities are prepared for a hotter future.

The Cool Neighbourhoods Strategy is built around three key pillars, each designed to reduce heat risk, enhance climate resilience, and prioritise equity across the borough.

Westminster's three pillars of Heat Resilience

Cool Buildings

Helping People Stay Cool Indoors

Rising temperatures pose a growing challenge for Westminster's homes, workplaces, and public buildings, many of which were not designed for extreme heat.

Londoners spend 90% of their time indoors. Without intervention, overheating in buildings will worsen, particularly for those in overcrowded or inadequate housing. This pillar focuses on making sure homes and shared spaces are adapted to help people stay cool and protected during rising temperatures.

Outcome 1

Homes across Westminster are designed and upgraded to remain cool and resilient to rising temperatures.

Outcome 2

Public and community buildings are adapted to keep people cool and safe during high temperatures.

Cool Places

Helping People Stay Cool Outdoors

Westminster's parks, streets, and public spaces play a vital role in reducing the urban heat island effect and providing relief during heatwaves.

However, areas that are heavily built-up with hard surfaces and have limited tree cover or insufficient shade, such as busy retail and transport hubs, are highly vulnerable to extreme heat. This pillar prioritises greener, cooler outdoor spaces to create a more comfortable and climate resilient city.

Outcome 1

Westminster's public spaces and infrastructure are heat-resilient and provide cool outdoor environments.

Outcome 2

Westminster's public spaces are enhanced with green infrastructure and nature-based solutions.

Cool Communities

Helping People Know How to Stay Cool

Extreme heat affects everyone, but some groups, such as older adults, young children, people with health conditions, and those in low-income households, are at greater risk.

Many people also lack awareness of heat risks and available resources, leaving them unprepared for extreme temperatures. This pillar strengthens community resilience, improves access to cooling resources, and ensures that people have the knowledge and support they need to stay safe.

Outcome 1

Improved access to cooling resources and services for vulnerable populations in Westminster.

Outcome 2

Increased public awareness and education on heat risks and safety measures across Westminster.

Outcome 3

Strengthened community resilience and engagement in managing heat risks.

Maximising benefits and advancing equity

At the heart of this strategy is a commitment to environmental justice and equity.

While the strategy provides actions that are relevant to all neighbourhoods and residents, it places additional focus on communities that face the greatest burdens from extreme heat, and the greatest barriers to fair equitable access, to cool healthy neighbourhoods. By centering environmental justice, Westminster can better address the root causes of increased risk and vulnerability in communities disproportionately affected by climate change and ensure that the Council equitably protects all residents.

When developing the Cool Neighbourhoods strategy, we mapped each action to ensure it delivers tangible benefits for heat resilience and equity throughout Westminster. Each action contributes to one or more of the benefits opposite.

By delivering these outcomes under the three pillars of heat resilience, Westminster will ensure that homes, public spaces, and communities are prepared for the impacts of extreme heat, creating a safer, healthier and more climate-resilient city for all.

1 Heat Reduction

Does the action help lower temperatures in the area, contributing to a cooler environment?

2 Heat Relief

Does the action provide respite or cooling for individuals during extreme heat events?

3 Public Health

Does the action reduce heat-related health risks and improve overall community well-being?

4 Equity

Does the action ensure equitable access to heat resilience measures, particularly for vulnerable communities, and address disparities in exposure to extreme heat?

5 Natural Environment

Does the action enhance or protect the natural environment, such as increasing green spaces or improving biodiversity?

6 Carbon Emissions

Does the action help reduce carbon emissions, contributing to our net-zero targets?

Cool Buildings

The design and quality of buildings plays a key role in managing indoor temperatures, making them essential in protecting Westminster from the effects of a warming climate.

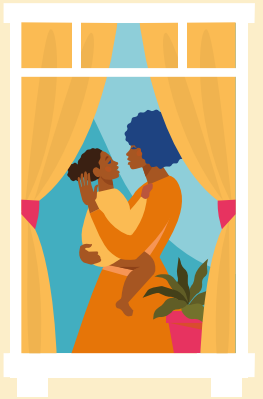
Currently, half of UK homes suffer from overheating risk and future climate projections show this will increase to over 90%[15].

Many buildings have been designed to retain heat in winter but not to stay cool in summer, making indoor temperatures higher than outside, especially in the evening. Extended exposure to heat can impact health, particularly for vulnerable groups. Addressing overheating can significantly improve wellbeing by preventing heat stress, dehydration, impaired sleep and other health risks.

This is particularly a challenge for Westminster where dense urban development, historic building stock and extensive conservation and heritage zoning currently limits the solutions available to residents, property owners and developers.

However, these challenges also present an opportunity to explore innovative solutions. Passive cooling techniques can reduce overheating without increasing emissions and household bills, while improved ventilation can make buildings more comfortable, energy efficient and improve indoor air quality. In most cases, combining both adaptation and mitigation strategies will offer the most effective solutions to sustainably cool buildings in Westminster without exacerbating climate change.

By enhancing how our buildings respond to rising temperatures, we can protect vulnerable residents, reduce reliance on energy-intensive cooling systems, and help ensure Westminster's built environment supports both the health of residents and the long-term sustainability of the city. This is particularly important for Westminster's socially deprived areas that already experience high heat risk and have the most to gain from the many benefits of comfortable, efficient homes that are warm in winter and cool in summer.



Outcome 1

Homes across Westminster are designed and upgraded to remain cool and resilient to rising temperatures.

Actions

- Review and revise planning policies, documents and procedures to minimise overheating risk in new and existing buildings.
- Adopt a holistic approach to improving housing quality by integrating energy efficiency, public health, and climate resilience measures, prioritising areas with greatest social deprivation and heat risk.

Outcome 2

Public and community buildings are adapted to keep people cool and safe during extreme heat.

Actions

- Support public, private, and community-sector organisations to assess heat risks and adopt low-carbon cooling solutions.
- Promote heat resilience in Council-owned facilities by ensuring heat risk assessments are conducted and low-carbon cooling interventions are implemented.

I couldn't be at home. We're in a third floor flat, so we're essentially in the roof space and our flat is south facing, so the sun is in the living room all day... it was so hot on those two days that we just had to pack up and be out of the house because it was just suffocating.

Westminster resident

Cool Buildings Case Study

Housing regeneration delivers 226 climate-smart homes

In late 2024, Westminster City Council proudly completed the first phase of the new Ebury Bridge Estate, adding a mix of returning leasehold homes, private market sale homes and 100 high quality Council homes to the Pimlico, Knightsbridge and Belgravia area.

Tenant liveability and sustainability has been central to the design of this BREEAM 'Outstanding' rated development. The development benefits from blue roofs collecting storm water runoff, energy efficient appliances, LED lighting and reused building materials during construction. Ebury Bridge will provide facilities and spaces supporting the health and wellbeing of residents, including a new community hub, nursery, play facilities, fitness centre, and four attractive public squares and pocket parks. The building design has also planned for a warming climate, improving the comfort for tenants during extreme heat with energy efficient and passive elements such as:

- Dual aspect flats to allow for cross ventilation,
- Operable windows and by-fold balcony doors that allow cool air and wind to enter the property,
- Protruding facades and awnings shade balconies and windows below,
- Shaded portable covers on the upper floor terraces,
- Blinds provided and fixed to all homes prior to move in,
- Ground source and air-source heat pumps to provide energy efficient cooling in summer.

Future phases of the development will deliver 334 more homes, with the completed development welcoming 370 tenants into council homes for social rent.

What you can do for Cool Buildings

It's important that buildings are built and designed to be cool in summer. But human behaviour can also significantly impact the indoor thermal comfort of occupants inside buildings. Try these simple tips below to cool your property during high temperatures.

Stop the heat coming in from outside

Keep heat out by closing curtains and blinds during the day, especially in unused rooms like bedrooms. External shading (e.g., awnings or shutters) is even more effective, and reflective window films can help too – with the right permissions.

Get the heat out of your building

Open windows when it's cooler outside, typically at night, to let in fresh air. To create a cool breeze, open windows on opposite sides of the room or building.

Switch off indoor sources of heat

Did you know that electronics, appliances and services can be a source of heat inside your property? Turn off lights and appliances you're not using, and make sure your heating is off.

Sign up for a free home assessment

Westminster's *Home Energy Advice Service* provides assessments and advice for cooling your home in summer. By signing up to the free service, a Green Doctor will visit your property, provide a quick assessment and offer tips, advice and resources to help transform your home to be more comfortable, with reduced energy bills.

Use fans wisely

Use fans to circulate air but avoid pointing them directly at you in a hot room. Instead, position them to move cool air through the space. You can also place a bowl of ice in front of the fan to help cool the air.

Cool Places

Westminster's dense urban fabric, characterised by buildings, roads, and hard surfaces, intensifies the urban heat island effect, making pockets of the city significantly hotter than other areas.

As climate change drives more frequent and intense heatwaves, creating cooler public spaces becomes vital, particularly in Westminster's most socially deprived areas.

The urban heat island effect, which traps heat in built-up areas, is strongest in Marylebone, Queen's Park, Church Street, Pimlico North, and the East side of St James's Ward, where daytime surface temperatures can be 10-15°C hotter than Westminster's coolest areas such as Hyde Park[16]. Green infrastructure, such as trees, parks and water features can lower temperatures, improve air quality, and support mental and physical wellbeing. These spaces also foster community connection, provide shade and comfort during daily routines, promote biodiversity, and make the environment more resilient.

Recognising that heat affects people beyond their homes, Cool Places focuses on ensuring that Westminster's public realm, such as high streets, parks, pavements, and transport routes, offer safe, shaded, and comfortable environments for everyone. From outdoor recreation to everyday commutes, people should feel protected from extreme heat at every step of the way. At the same time, creating and maintaining cooler outdoor spaces helps protect the natural environment itself, ensuring that trees, plants, and green infrastructure can continue to thrive, and provide the essential cooling, health and biodiversity benefits we rely on.

Outcome 1

Westminster's public spaces and infrastructure are heat-resilient and provide cool outdoor environments.

Actions

- Support cooler commutes by working with TfL and other stakeholders to improve heat resilience in public transport, and by promoting measures to reduce heat absorption in highway infrastructure.
- Support cooler high streets by improving heat resilience in the public realm and encouraging businesses and other organisations to implement shade and cooling solutions, prioritising areas with greatest heat risk and social deprivation.
- Assess the availability of public water sources and explore the feasibility of enhancing cooling options through water infrastructure.
- Review public open spaces in Westminster's most vulnerable areas, including playgrounds and recreational areas, to assess heat retention and identify opportunities for cooling improvements.

Outcome 2

Westminster's public spaces are enhanced with green infrastructure and nature-based solutions.

Actions

- Maintain, plant and protect Council owned trees to support a long-term increase in tree canopy cover, targeting a 10% increase of existing cover by 2050.
- Identify opportunities for nature-based adaptive measures to cool Westminster.
- Review opportunities for our public realm schemes to green our streets and public spaces.

> *[In winter] Westminster was very helpful. People could go to different places and could sit down and enjoy the heating, now I think we need to have the same as the heat which was for cost of living... the Westminster libraries or community centres could welcome people to sit in our community to stay cool.*
>
> Westminster resident

Cool Buildings Case Study

Inner-city mini forest creates multiple benefits in heat-prone area

In partnership with Ruth Wilmott Associates and Creating Tomorrows Forests, Westminster City Council planted 426 new trees in Westbourne Green to create a micro forest in the heart of central London.

Local schools got involved on the day and helped name the new forest. Nine native tree species have been prioritised in the planting, to create multiple benefits in Westbourne:

- Absorbing air pollution particulates, particularly from the nearby Westway
- Reducing noise for local residents
- Creating habitat for biodiversity to thrive
- Improving soils and retaining rainwater, reducing flood risk
- Offering a natural escape in the heat of the city, improving liveability and wellbeing, and
- Cooling the local area during extreme heat events.

Greening initiatives, such as micro forests, can cool local areas because shade-bearing trees stop the sun's direct solar energy heating up the ground and buildings nearby. Additionally, a cooling effect in the air is created when plants absorb water and release it back into the air as vapour, (a process called evapotranspiration). Planted in February 2025, this micro forest is the first of six to be planted in Westminster.

What you can do for Cool Places

It's important to keep cool when you're out and about in Westminster. Try these simple tips to stay cool if you happen to be in public areas during extreme heat.

Stay hydrated and refill

Make sure you take a reusable water bottle with you and refill it at any of the many Refill locations throughout Westminster. Download the *Refill app* to your mobile phone and quickly check your local map to see which locations to access water is closest.

Seek shade

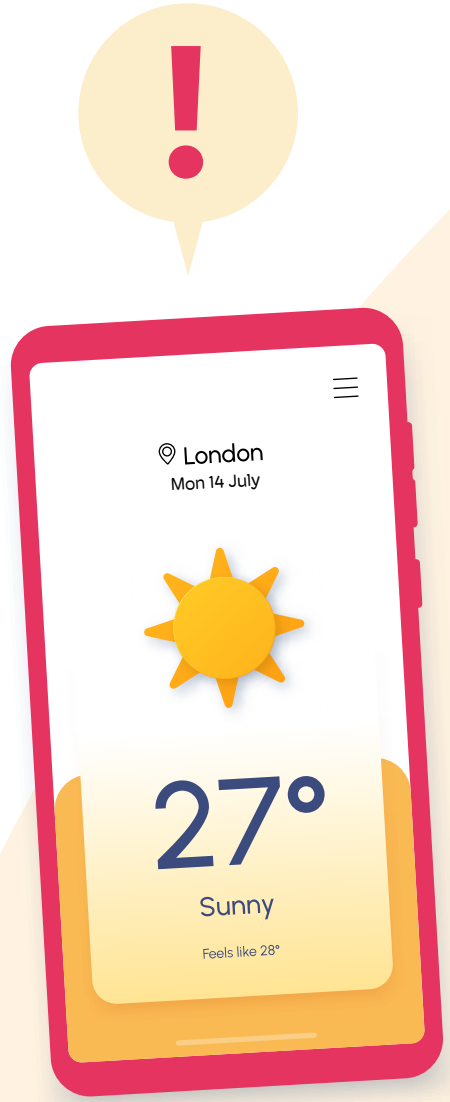
When outdoors, try to stay in shaded areas such as trees, awnings, or covered public spaces. If none are available, bring your own shade with a large hat or umbrella. If you're walking or doing physical activities, take regular breaks in the shade to rest and cool down.

Sign up for weather alerts

Download the *Met Office app* and set notifications for severe weather alerts for your local area. Check the day's forecast before leaving the house and try to avoid being outside during the hottest parts of the day, typically 11am to 3pm.

Visit a Cool Space

Westminster has several Cool Places available for the public where you can take a break from the heat, including community hubs, libraries and green spaces. Visit the *London Cool Spaces* map to see where your nearest location is. Only visit a Cool Space if it's safe to travel. It may be safer to stay at home if your home does not overheat.



Cool Communities

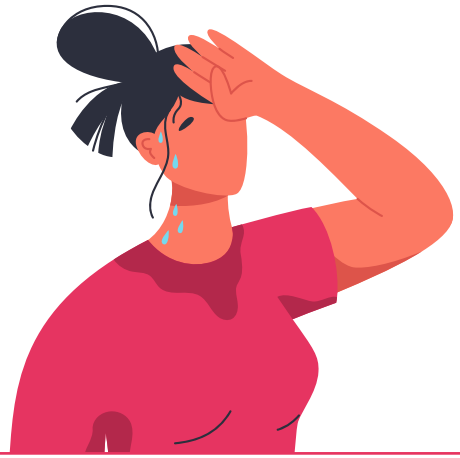
Extreme heat is a growing risk, yet public awareness and preparedness remain low because heatwaves have not historically been seen as a major climate risk in the UK.

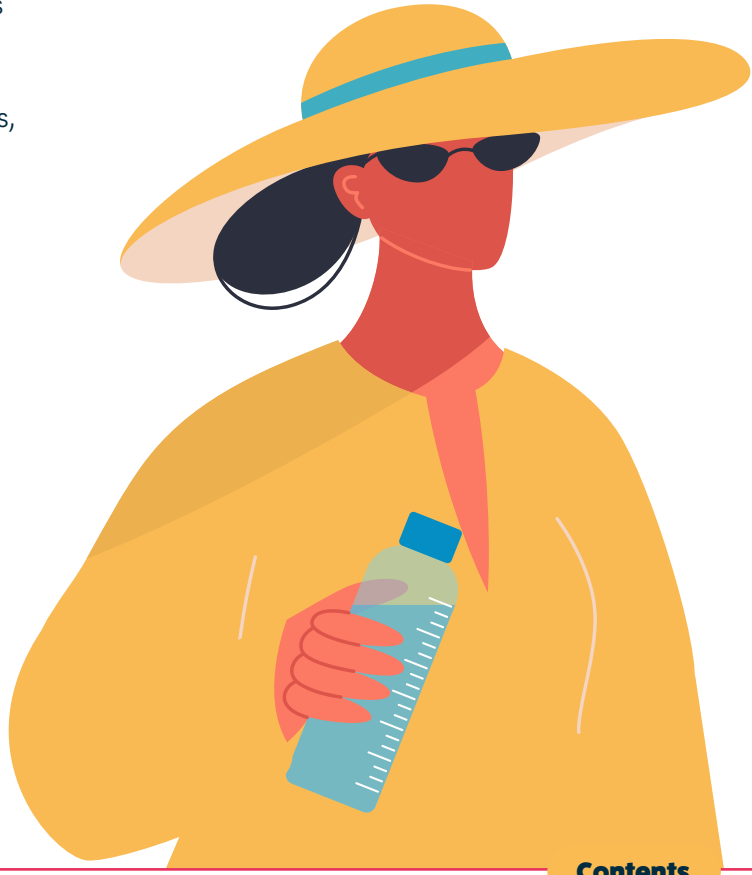
Unlike cold weather, where long-standing support systems help people manage these risks, heat measures are less developed, and many communities do not have the information or resources they need to stay safe.

44% of UK adults consider heatwaves a normal part of summer, and 37% believe they will only become a problem in the future[17]. As heat waves become more frequent and intense, improving public awareness and support systems will be essential to protecting people's health and wellbeing.

The consequences of extreme heat are already being felt. In 2022, England recorded 2,985 heat-related excess deaths, with a significant number occurring in London[18]. Many of those most at risk face significant barriers to staying cool, including limited access to cooling, inadequate housing, and social isolation. These impacts are not felt equally, with heat risk disproportionately affecting older adults, young children, people with pre-existing health conditions, those living in poor-quality housing, and communities experiencing socio-economic disadvantage.

Building heat resilience is not just about adapting the built environment or public realm, it is about ensuring that all communities have the knowledge, resources, and support to stay cool and safe. By expanding public awareness, strengthening community networks, and improving access to cooling resources, Westminster City Council can ensure that everyone, not just those with financial means, have the tools to stay safe in extreme heat.





Outcome 1

Improved access to cooling resources and services for vulnerable populations and areas in Westminster.

Actions

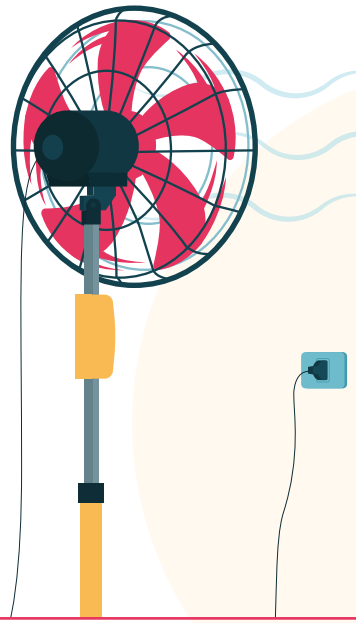
- Establish and promote free-to-access and inclusive cool spaces across Westminster, ensuring alignment with the *GLA's Cool Spaces Map*.
- Strengthen peer support networks to help community members check on each other during heatwaves ensuring they have access to cooling resources and support.
- Distribute cool kits through community partners to support residents in staying cool at home, ensuring resources are distributed equitably in Westminster.

Outcome 2

Increased public awareness and education on heat risks and safety measures across Westminster.

Actions

- Launch a long-term public education campaign to inform residents, visitors and workers about Westminster's heat risks, how to stay cool, and where to access cooling resources.
- Work with health and care services to embed heat health information into care practices and ensure staff are equipped to support vulnerable individuals during extreme heat events.



Outcome 3

Strengthened community resilience and engagement in managing heat risks.

Actions

- Train local leaders and community champions on heat resilience to promote heat safety and guide residents to available resources.
- Update and maintain emergency response plans to manage heatwaves, ensuring coordination and support for vulnerable populations.

> *I don't think we're very well prepared for heat and that showed last time we had heat before, people were doing snap responses... going and buying fans, but they didn't know the basics of keep your blinds down... keep the heat out of your house, rather than try to drive it out.*
>
> Westminster resident

What you can do for Cool Communities

There are many small things you can do that make a big difference when it comes to keeping yourself and your community cool.

Dress for the weather

Wearing light-coloured, loose-fitting clothing made from breathable fabrics (like cotton or linen) can make a real difference in staying cool during hot weather.

Stay hydrated

Drink plenty of water and eat foods with high water content, such as fruits and salads. Avoid alcohol, tea and coffee, which can dehydrate you.

Keep cool at home

Move to a cooler room, especially for sleeping. Take cool showers and avoid physical activity during the hottest parts of the day. See *page 26* for tips on keeping your home cool.

Protect your skin

Always apply sunscreen to protect yourself from sunburn, as excessive exposure can make you feel hotter and increase the risk of heat-related illness.

Check in on others

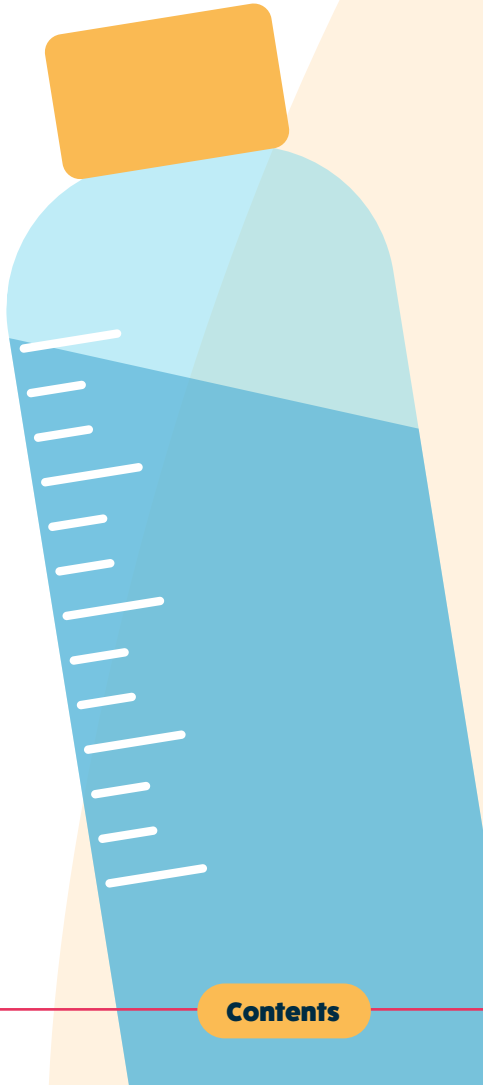
A simple phone call can make a big difference. Check in on friends, family and neighbours who may feel the heat more than others, particularly elderly people, people with underlying health conditions or disabilities and people who live alone.

Know the signs of heat exhaustion

If you or someone you know feels tired, dizzy, sick, sweaty, weak, or thirsty, experiences cramps, or breathes quickly, you should rest in a cool place, drink fluids and use ice packs. Call 111 for medical advice if symptoms persist.

Know the signs of heatstroke

Heatstroke is a medical emergency. If someone has a very high temperature, hot skin, a fast heartbeat, rapid breathing, confusion, seizures, or loses consciousness, call 999 immediately.



Glossary

2° warming level
Scenario where the global mean temperature is predicted to reach +2°C compared to the pre-industrial period (1850-1900).

4° warming level
Scenario where the global mean temperature is predicted to reach +4°C compared to the pre-industrial period (1850-1900).

Climate Adaptation
The process taken to adjust to the impacts and risks of climate change.

Climate Mitigation
Ongoing attempts to limit climate change through reducing greenhouse gas emissions in the atmosphere.

Climate Resilience
The capacity to prepare for, respond to, and recover from climate impacts and risks while incurring minimal damage to wellbeing, the economy, and the environment.

Climate Risk
The potential for climate change to create adverse consequences or impacts for natural and human systems and environments in the future.

Net zero
The balance between the emissions we produce and those we remove from the atmosphere through emission saving activities and offsetting. We achieve net zero when the emissions we produce each year is equal to or less than the amount we take away. This can be achieved by reducing the emissions we produce and offsetting any remaining emissions that are too expensive or complex to prevent entirely.

Retrofit
Improving existing buildings by adding new systems and technologies to meet changing needs.

Vulnerability
Propensity or predisposition [of people, livelihoods, species or ecosystems, environmental functions, services, resources, infrastructure, or economic, social or cultural assets] to be adversely affected by climate risk.

You Said, We did

We want more accessible green space and greenery in Westminster

Our Cool Places pillar focuses on improving the quality, quantity and accessibility of green space in the borough. This work is supported by our *Greening and Biodiversity Strategy*. This, alongside the Cool Neighbourhoods Strategy, will ensure added greenery provides real cooling benefits for local communities.

Ensure our homes don't overheat in summer

Our Cool Buildings pillar focuses on ensuring that Westminster residents can stay cool inside their homes. This includes reviewing planning policies and guidance to support new developments and retrofits that reduce overheating. In addition, we are promoting practical year-round interventions that work in Westminster's built environment.

We need to have the same as warm spaces during winter, but this time to escape the heat in summer. Places for people to sit in our community and stay cool

We're working with community venues, local businesses, places of worship, and Council-run buildings to increase the number of cool spaces listed on the Mayor of London's map, giving residents and visitors safe, welcoming places to take refuge and escape the summer heat.

Help businesses prepare for heatwaves

Through all three pillars, we are committed to providing businesses with support and guidance to understand their specific risks to extreme heat and how to take action to build heat resilience for their staff and customers. We will also strengthen advice and support to *Sustainable City Charter* signatories to take action that both reduces their emissions and build their resilience to extreme weather events.

You Said, We did (continued)

Unlike the cold and rain, I feel like I don't know what to do during heatwaves, the heat is inescapable

There are many actions individuals can take to keep themselves and their property cool during summer. Our Cool Communities pillar details how Westminster City Council will deliver public communications and engagement that will help residents, visitors and workers, know how to prepare for extreme heat, and stay safe during heatwaves. We are also expanding existing programmes, such as the Home Energy Advice Service, to offer households personalised home visits with tips and advice for keeping cool in summer and warm in winter.

My son's school wasn't cool and he would come out sweating... I was thinking, how did they even learn?

Our Cool Buildings pillar details actions that focus on reducing overheating in schools as young people are more vulnerable to the impacts of extreme heat, such as heat stress.

More water drinking fountains available on the streets and public spaces

Our Cool Places pillar outlines actions we are taking to improve the availability and signposting of drinking water fountains throughout the borough. This includes assessing opportunities for delivering new water infrastructure and partnering with organisations, such as Refill, to grow our network of free water refill locations.

I feel like heatwaves don't affect me very much, but my elderly family members certainly feel the heat more than I do

Our Cool Buildings pillar includes actions that focus on reducing overheating in aged care facilities as elderly people are more vulnerable to the impacts of extreme heat, such as heat stress. Through our Cool Communities pillar, we will work directly with Westminster City Council's public health and adult social care teams to ensure knowledge and skills regarding extreme heat and embedded in the Council's service.

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