

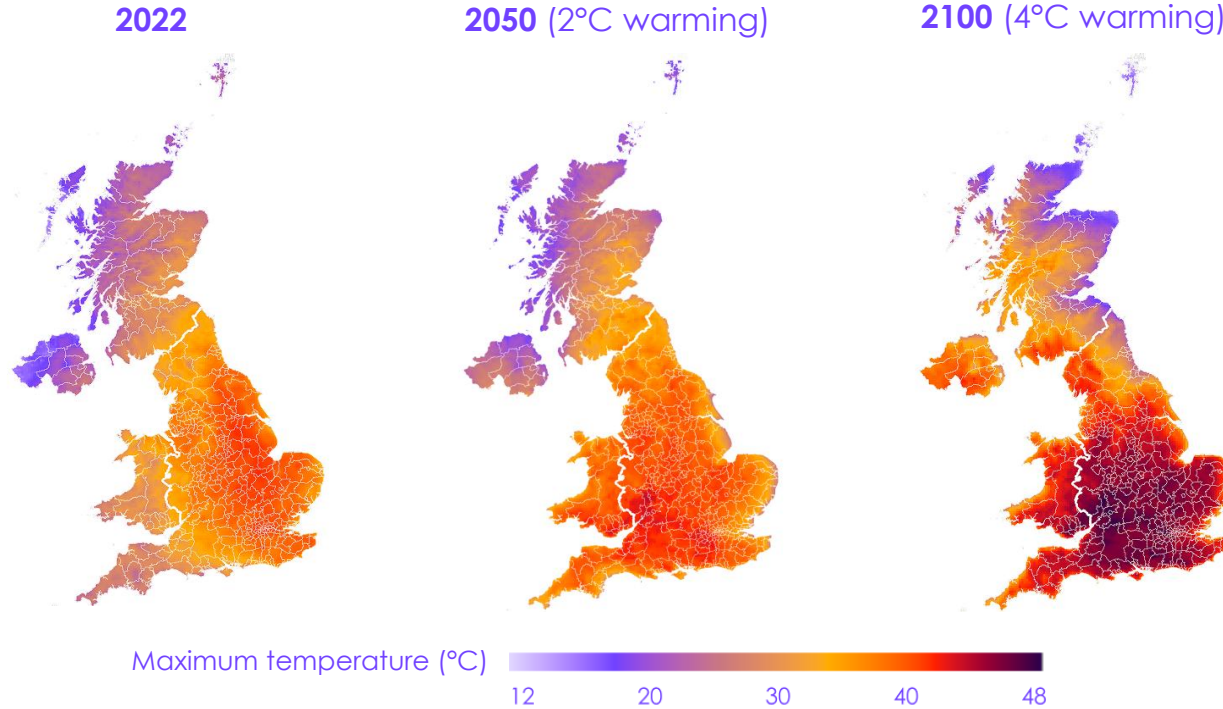
22 October 2026

A well-adapted UK and the role of local authorities

Dr Sandra Bogelein, UK Climate Change Committee

Heatwaves in the UK will be more frequent, longer, and more intense than they are today

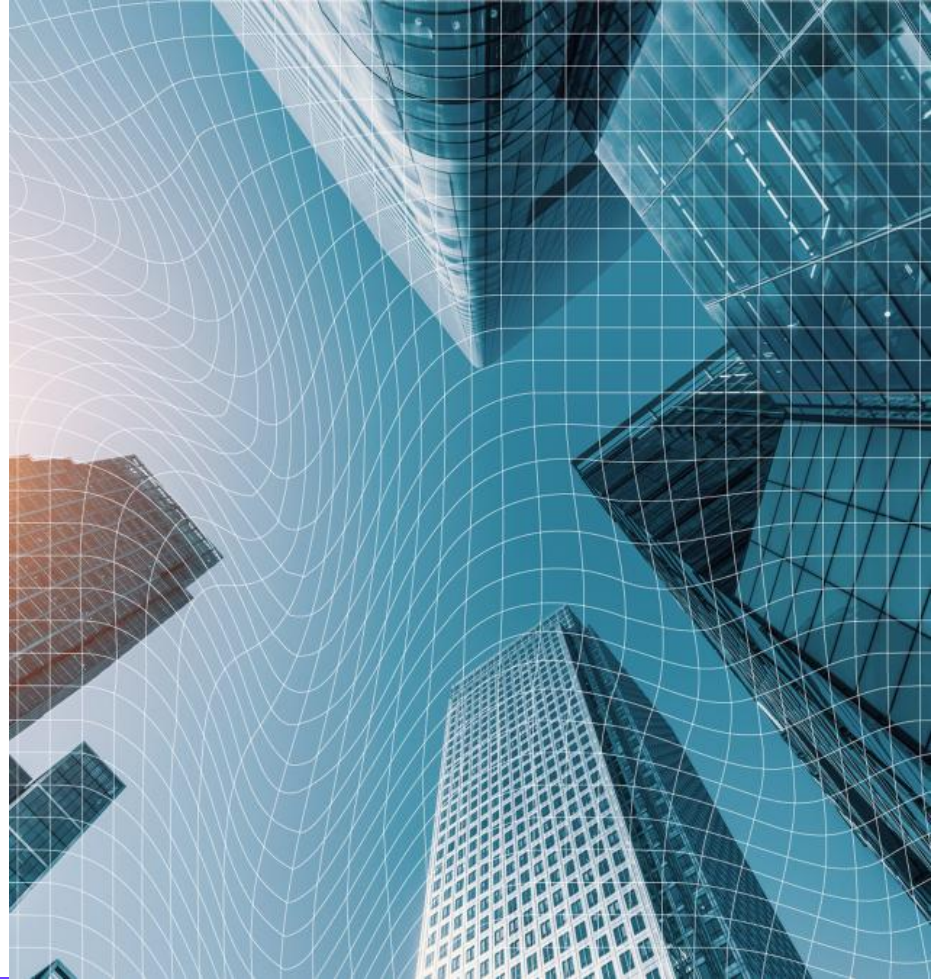
Recent and projected maximum temperatures



Source: Hollis, D. et al (2025) *HadUK-Grid Gridded Climate Observations on a 5km grid over the UK, v1.3.1.ceda (1836–2024)*; Met Office (2025) *UKCP Local Projections on a 5km grid, bias corrected using scaled distribution mapping, over the UK*.

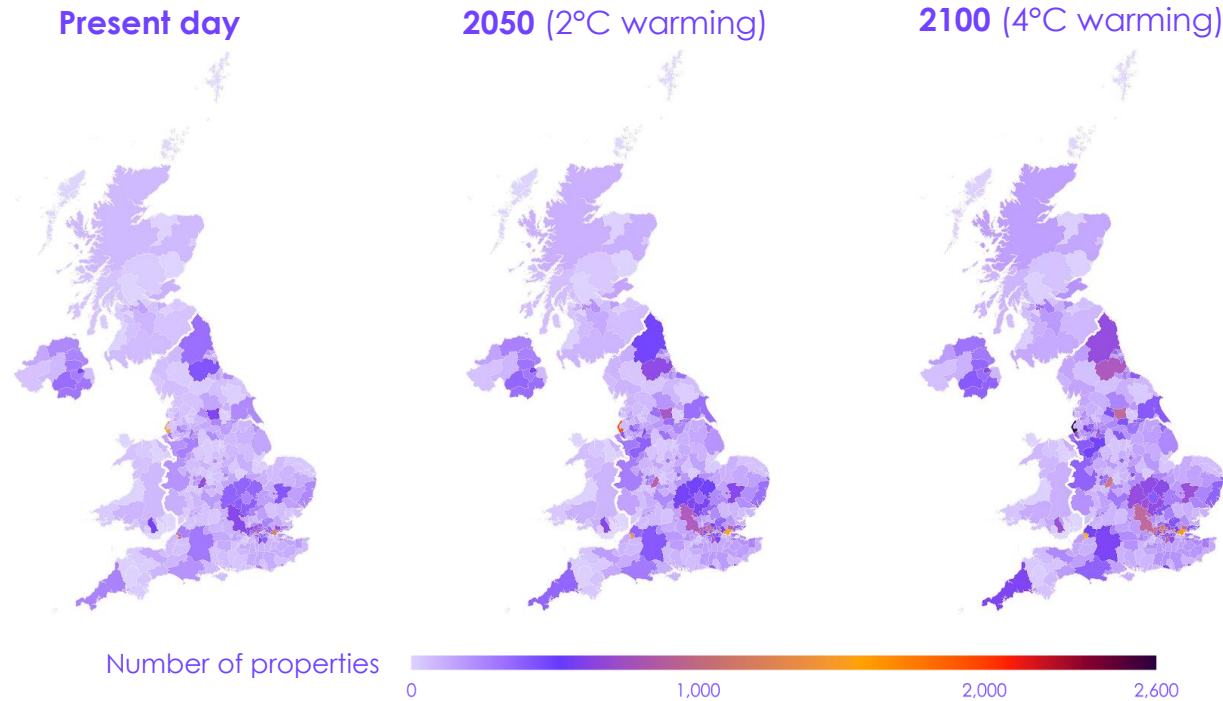
Overheating Actions

- Without adaptation 92% of existing homes would overheat by 2050.
- Urban green infrastructure can provide cooling and shade.
- Passive and active building scale cooling measures can prevent overheating of homes and public buildings (for example, schools, hospitals, care homes).
- Behavioural changes can reduce risks of extreme heat.
- New buildings should be sited and designed to keep people cool.



Flood risk will rise from surface water

Current and projected properties flooded by surface water



Source: Sayers, P. et al (2026) *Well-Adapted UK - Future Flood Risk*

Flooding Actions

- Without adaptation the number of properties impacted by flooding from all sources could rise by up to 40% by 2050.
- A combination of engineered flood defences and natural flood management can reduce flood risk.
- Sustainable drainage systems (SuDS) and urban green infrastructure can reduce the likelihood of surface water flooding.
- A rapid rollout of property-level flood resilience measures for existing properties in places that are already at risk of flooding can reduce damage.
- Planning policy and building regulations should ensure that new development avoids areas at risk of current and future flooding and is designed to be resilient when flooding occurs.



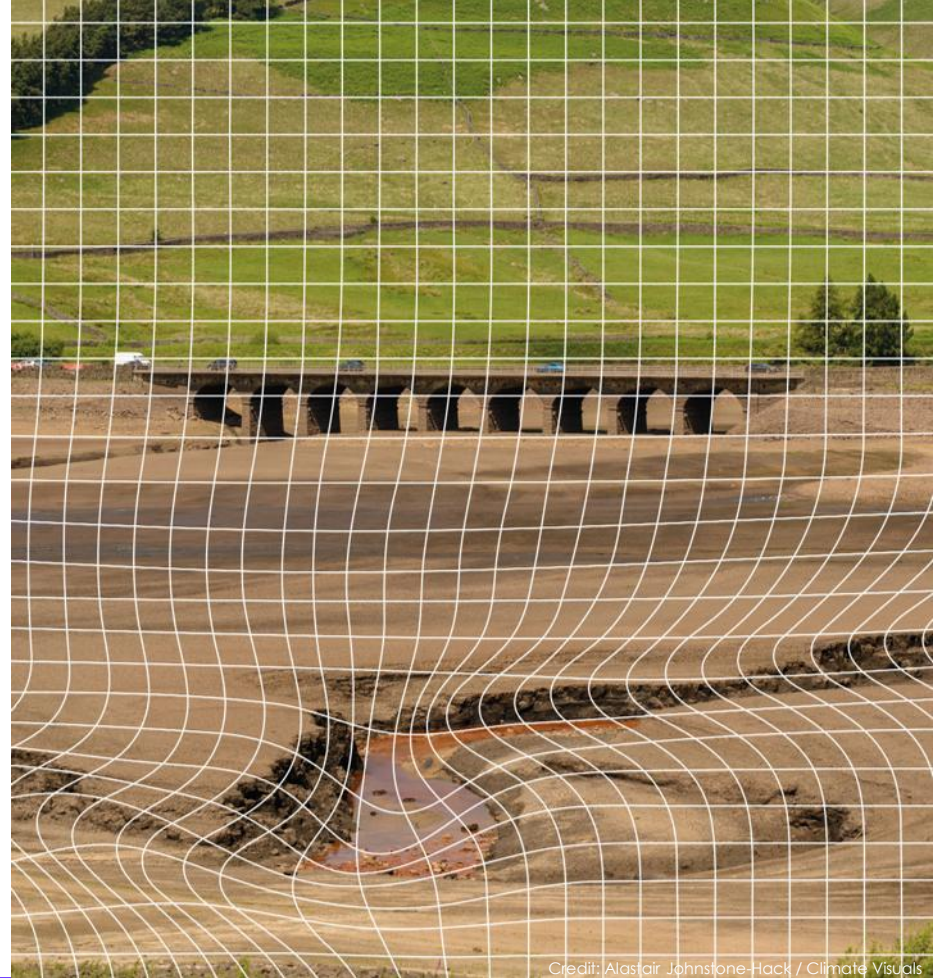
Credit: Christopher Furlong / Getty Images

The UK is already experiencing climate change

Impacts from drought intensify in the future

Under a 2°C scenario by 2050:

- Some summers will have half the rainfall of a typical summer today.
- Water in rivers will decrease by 30%.
- Extreme agricultural drought will be three times more likely.



Credit: Alastair Johnstone-Hack / Climate Visuals

Water resilience

Actions

- More water storage and supply are needed to manage drought risk. This requires:
 - More reservoirs and interconnectors.
 - Improving raw water quality (pollution management, e.g. SuDs to slow water flow) and treatment capacity.
- Reduced leakage rates from the water system are needed.
- Water saving behaviour should be encouraged.
- Buildings should have water efficient designs and appliances.
 - Includes measures such as installing low-flow fixtures (like taps and toilets), water efficient appliances and water-efficient landscaping (smart irrigation, water recycling).



Credit: Christopher Furong / Getty Images

Land Actions

- **Wildfire management:** actions to reduce the occurrence and spread of wildfire.
- **Blanket bog and peatlands rewetting:** blocking drainage to keep water tables high to protect habitats from high temperatures and drought.
- **Species and site selection for future climate:** for example, tree species selection based on future climate conditions.
- **Changes to farming practices:** actions such as farm water storage and crop diversification can increase resilience.
- **Local strategies:** Local Nature Recovery Strategies (LNRS) can deliver adaptation actions such as nature connectivity.

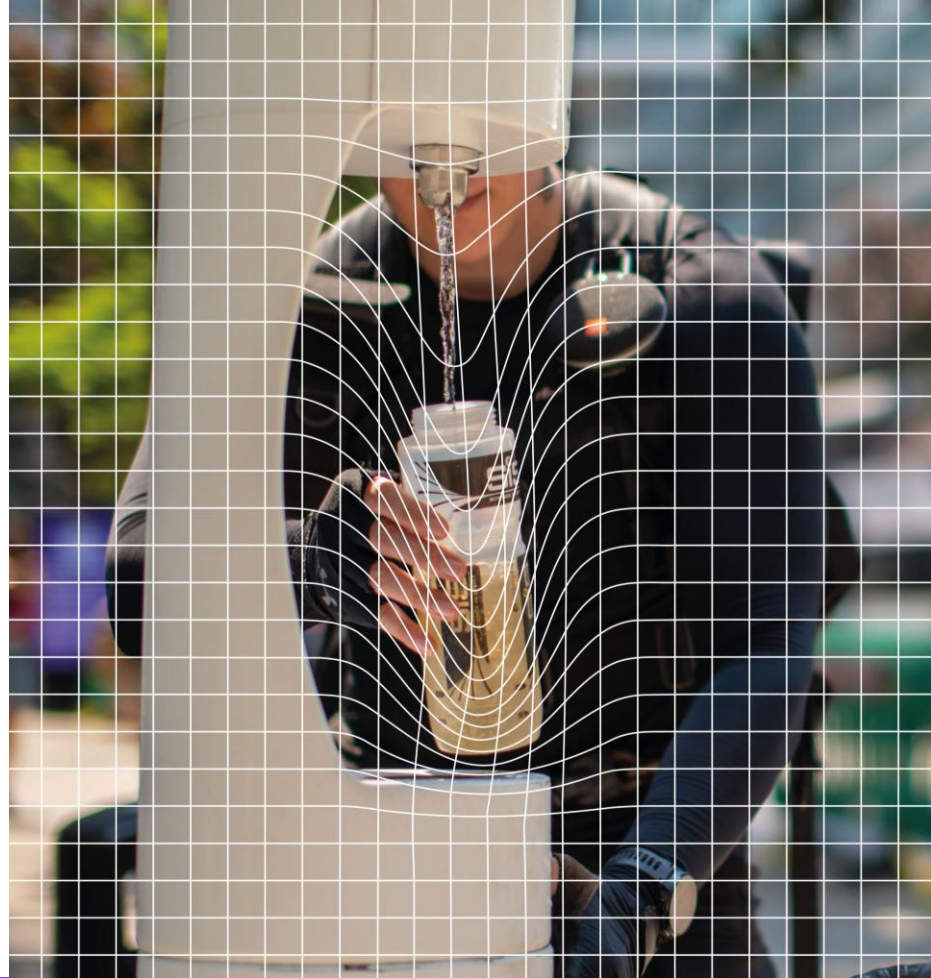


Credit: James Dobson / National Trust Images

Additional considerations for local authorities

From commissioned reports

- **Adapting council operations and services:** Emergency plans and business continuity plans should address climate impacts, and plan for potential staff shortages and transport, energy and telecommunication disruptions.
- **Climate resilient financial planning:** local authorities can prepare for climate impacts by:
 - Integrating the cost of climate impacts and adaptation into core financial management processes.
 - Ensuring councils obtain and maintain insurance cover that is adequate and cost-effective for climate-related risks.
 - **Engaging communities, households and businesses** (including supporting vulnerable residents).



Raising awareness amongst the public and businesses

The Well-adapted UK report highlight important household actions for a well-adapted UK

1. Being prepared

- Know the risks.
- Stay informed through alerts.
- Plan ahead by keeping emergency kits and know what actions to take during heatwaves and floods.
- Access extra support, for example through the Priority Services Register.
- Arrange adequate insurance.

2. Home adaptations

Households at greater risk of flooding or overheating should consider adapting their homes or discussing options with their landlord, such as:

- Cooling technology.
- Insulation.
- Shutters or fans.
- Installing flood doors to prevent flooding.

3. Supporting wider resilience

- Help the community, for example by sharing information during extreme weather events.
- Save water, for example through installing water-efficient devices and fixing leaks quickly.
- Reduce flood and heat risk, for example through creating permeable or green areas.