



Foreword

Climate change is one of the most pressing challenges of our time, its impacts already being felt across Staffordshire and beyond. Rising temperatures, more frequent extreme weather events, and shifting seasonal patterns are reshaping the way we live, work, and interact with our environment.

At Staffordshire County Council we are committed to these challenges, making significant strides in our climate action journey. Since declaring a climate change emergency in 2019, we have reduced our carbon emissions by 52%. However, reducing emissions alone is not enough. We must also prepare for the inevitable changing climate that will affect our communities, infrastructure, and natural environment.

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This plan outlines how we plan to continue our path to net zero and to build climate change resilience into our services. By proactively identifying risks and opportunities, we can protect lives and livelihoods while fostering a prosperous future for all.

Although there are uncertainties around national and international direction, we remain committed to delivering strong actions at a local level. Working with our partners, residents and businesses our actions today will help to shape a safer and more sustainable tomorrow. Together, we can ensure that Staffordshire remains a safe and vibrant place for generations to come.



Introduction

Staffordshire County Council declared a climate change emergency in 2019 and set a target to achieve net zero emissions by 2050 for directly managed services and properties. Since then, we've made good progress in cutting emissions and including climate change in our decision-making processes and plans, while also helping others to take action.

Staffordshire County Council seek to continually improve the way we mitigate and manage the impacts associated with climate change. This refreshed plan looks to build on our work towards net zero and introduce more actions to build greater climate change resilience so the county can thrive into the future.



Staffordshire's changing local climate

Our climate is changing and will continue to increasingly change over the coming decades. Even if rapid cuts to global emissions are achieved, some level of climate change is inevitable this century.

We can expect hotter drier summers, milder wetter winters with more extreme weather at all times of year.

Flood risk

Although summers are expected to be drier, the rain that does fall is likely to be more intense, increasing flood risk. Areas of Staffordshire are already at risk of river and surface water flooding and disruption to urban drainage systems. These impacts are likely to become more intense and frequent with climate change.

Prolonged periods of rain resulting in saturated ground, followed by intense storms, such as those experienced in 2007, 2012 and 2020 increase the likelihood of flooding. Six out of the ten wettest years have occurred since 1998 (from records dating back to 1862), with UK winters being on average 12% wetter than 1961-1990.

Extreme heat

Staffordshire's summers are expected to be hotter and drier and with longer duration. Hot weather can impact our buildings, assets and people's health. We need to consider the impact this will have on our communities and staff, especially the vulnerable.

In 2022, temperatures exceeded 40 degrees for the first time.

Extreme heat does not impact everyone equally. Some individuals or communities will be more at risk with circumstances impacting people's ability to cope with, adapt to and recover from extreme heat.

The young, elderly and vulnerable can be particularly at increased risk.

Drought

Droughts can impact the environment, businesses and put our water supply at risk. With increasing frequency and severity of heatwaves and summer drought, wildfire risk is also projected to increase which can impact local air quality and damage local wildlife and habitats.

The driest summer for 50 years was recorded in 2022 with several wildfires breaking out on Cannock Chase.



Our approach to climate change

Key themes

Staffordshire County Councils Strategic Development Framework sets out an approach for achieving our net zero ambition and a climate resilient county. The Staffordshire Adaptation Strategy is an agreed joint approach with the counties district and borough councils to work together to build resilience into our services and the local environment.

Within these documents a range of objectives have been identified across key themes. These five themes have been applied to the risk assessment and action plan.











The Action Plan

The action plan has taken an all-inclusive approach to climate change. It builds on our work towards net zero and introduces actions to build greater climate change resilience so the county can thrive into the future. Our priority actions are outlined below, the full action plan is included in Appendix 1.

Action Plan Priorities



Flood risk management



Electric vehicle infrastructure



Climate resilient highways and rights of way



Supporting community climate action



Supporting businesses to a sustainable future



Waste reduction



Building decarbonisation



Tree and woodland expansion



Working in partnership

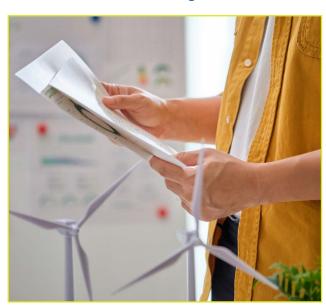


Maximising green skills opportunities

Action Plan Delivery

Governance

Effective climate risk management requires a clear direction, strong leadership and good control mechanisms. Tackling climate change is identified as a priority in the Staffordshire County Council Strategic Plan, ensuring climate change is considered across all services. To assist in driving this commitment, each directorate has an identified senior officer to provide strong leadership and direction to champion and embed our climate change commitments across the organisation.



Communications

We know the county council is a trusted source for information, relied upon for our impartiality and honesty.

Using our established communications channels/methods we will raise awareness and share information of climate risks, impacts and opportunities. We will also work collaboratively with communities and external organisations to build resilience to climate change and achieve widespread and sustained change.



Monitoring and Progress

We are committed to monitoring the action plan and track progress. Regular reviews will take place to check actions remain ambitious to keep pace with advancement in technologies and changes to national policies.

Our progress is reported each year in the Climate Change Annual Report.



Climate change risk assessment

Climate change can particularly affect vulnerable groups, including women, children, ethnic minorities, older populations, and those of a lower socioeconomic status or with an underlying health condition. We have completed a detailed risk assessment which identifies 55 climate risks relating to heat, cold, rain and storm events.

Our risk assessment considers how all our residents, businesses and visitors could be impacted. It is also important to note, not all impacts associated with climate change should be considered as negative. Positive opportunities can also arise for example increasing tourism opportunities. The risk assessment forms the baseline for identifying the detailed actions for building climate change resilience across the county.

The key elements from the risk assessment are summarised below. A full list of the risks is included in Appendix 2.

Critical infrastructure and buildings

Flooding of properties

Extreme heat causing properties to overheat

Conditions causing travel disturbances

Energy and water supply during extreme conditions



The local economy

Green job opportunities

Supply chain disruption

Price volatility for materials

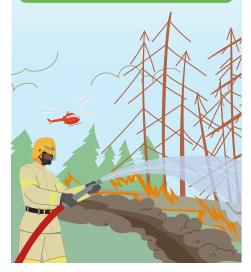


Natural environment and green spaces

Wildfires

Footpath erosion

Weather extremes impacting wildlife and habitats



Health, wellbeing and safety

Opportunity for increased outdoor recre

Heatstroke

Climate change anxiety

Social care challenges during extreme conditions



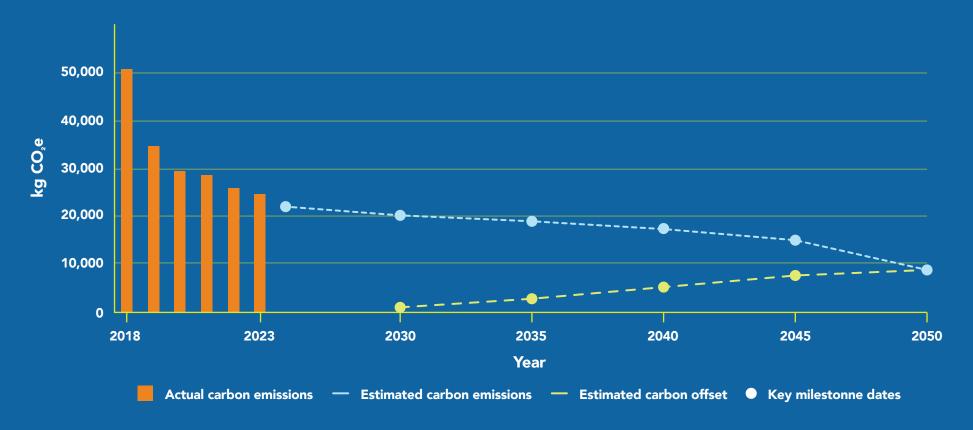
Programme roadmap

The council has declared a commitment to be net carbon zero by 2050. Whilst our aspirations are high to reduce this as much as possible, we acknowledge we cannot reach net zero without some carbon sequestration or offsetting. This also forms a key role within the plan.

Road map

Our roadmap (Figure 3) shows how we plan to reduce Staffordshire County Council's emissions. The reduction is based on targets set or being proposed by government as well as expected industry and economic changes. We understand there may be further changes to drive decarbonisation across the energy and transport sectors which could impact our estimated net zero path. We regularly review our roadmap to stay on track for our 2050 target.

(Figure 3) Carbon emissions road map



Source: Figure 3 Staffordshire County Council carbon emissions and estimated projection to net zero carbon

Appendix 1

Climate Change Action Plan



Ref	Core action	Sub action	Mitigation/ Adaptation	Risks addressed	Co-benefits	Target date
Electric v	ehicle transition					
CIB1.1	Increase the number of Electric Vehicle (EV) charging points.	Complete a feasibility study to better understand Staffordshire County Councils EV demand and capacity for charge points	Mitigation	n/a	Shift to EVs enables: Improvements in air quality, reduction in NOx emissions and particulate matter Reduced levels of noise pollution due to quieter EV engines Improvements in human health due to	Sep-25
CIB1.2		Develop a 2 year countywide EV charging implementation plan	Mitigation	n/a		Oct-25
CIB1.3		Work with Amey to roll out EV charging across highways depots where spare electrical capacity is available	Mitigation	n/a	better air quality and noise levels · Lower fuel, maintenance and insurance costs for many consumers	Mar-25
CIB1.4		Develop a costed plan EV infrastructure plan to allow for full transition within Staffordshire County Council fleet	Mitigation	n/a	· Job creation in low emission automotive and renewable energy sectors	Mar-26
CIB2.1	Transition fleet to alternative fuels or more carbon efficient where appropriate	Better understand fleetcare daily use through installation of telematics in fleet vehicles	Mitigation	n/a		Jun-25



Ref	Core action	Sub action	Mitigation/ Adaptation	Risks addressed	Co-benefits	Target date				
Managin	Managing our estate, schools and highways									
CIB3.1	Identify opportunities for carbon reduction of the corporate estate	Evaluate completed property decarbonisation plans and prioritise actions.	Mitigation	n/a	Enabling: · Lower energy bills · Improved thermal comfort for occupants · Less risk of damp and mould (if retrofitting measures are implemented correctly), leading to improved human health and lower maintenance requirements · Increased property values (incl. rental value)	Dec-25				
CIB4.1	Keep abreast of climate risks to council properties (e.g.heat, flooding, heat).	Complete annual condition surveys and target retrofit and maintenance actions as needed	Adaptation	I1, I2, I3, H1	Potential benefits include improved environment for staff and service uses	ongoing				
CIB5.1	Expand renewable generation and battery storage on corporate properties	Investigate potential for renewable generation on Enterprise centres and Recycling centres	Mitigation	n/a	Enabling: · Lower energy bills · Reduced exposure to energy price fluctuations · Increased visibility of sustainability initiatives, which could help increase awareness	Dec-25				
CIB6.1	Improve energy efficiency of highway infrastructure and equipment	Deliver annual traffic signals refurbishment/LED upgrade programme	Mitigation	n/a	Enabling: · Lower energy bills · Reduced maintenance requirements	ongoing				



Ref	Core action	Sub action	Mitigation/ Adaptation	Risks addressed	Co-benefits	Target date
CIB7.1	Investigate opportunities to reduce/slow runoff on verges	Liaise with highways to identify opportunities and partners (at locations) to trial innovative solutions to stormflow management	Adaptation	19, 111	Co-benefits depend on measures are adopted, potentially enabling: Reduced damage to infrastructure and physical assets	Dec-27
CIB8.1	Develop a blueprint for innovative working with schools on flood risk management	Secure funding for preliminary research	Adaptation	I1, H14	 Improved water quality, as reducing runoff can decrease the rate of pollutants entering water bodies Enhanced public safety Opportunities for habitat restoration Potentially, cost savings in water treatment downstream Green spaces created for stormwater management can act as recreational spaces with benefits to community collaboration and human health and wellbeing 	Dec-27
CIB9.1	Emissions monitoring	Continue to monitor and report the Council's annual carbon emissions	Mitigation	n/a		Annual
Waste ma	anagement					
CIB10.1	Develop a Staffordshire Materials Recovery Facility (MRF) to reduce haulage requirements	Commission a consultancy report to investigate options available and a business case for the development of a MRF in Staffordshire	Mitigation	n/a	Reduced haulage requirements could enable: · Lower energy demand and fuel bills for vehicles · Reduced air and noise pollution due to reduced vehicle movements	Sep-25
CIB11.1	Investigate options for using closed landfill sites for climate change mitigation or adaptation	Identify suitable technologies or changes to land management on closed landfill sites which could assist with climate change objectives	Both	NE8		Jan-26



Ref	Core action	Sub action	Mitigation/ Adaptation	Risks addressed	Co-benefits	Target date		
Highway	Highways							
CIB12.1	Establish a better understanding of the climate change implications	Commission work to better understand climate change implications related to the Highway Infrastructure Asset Management Plan (HIAMP).	Adaptation	I9 - I14		Apr-25		
CIB12.2	of Staffordshire's highways network	Evaluate and report the carbon impact of schemes delivered, to inform continual improvement across SCC's highways and transport portfolio	Mitigation	n/a		Mar-26		
CIB13.1	Integrate the effects of climate change into Highways management.	Complete a review and implement changes to enhance consideration of climate change into business resilience and operational responses.	Both	l9 - l14		Apr-26		
CIB13.2	3	Develop a pipeline transport programme through the Local Transport Plan that will be most effective in supporting transport decarbonisation in Staffordshire	Mitigation	n/a		Mar-26		
CIB13.3		Develop and agree a consistent methodology for assessing the whole life carbon of highway and transport schemes at the option appraisal, programming and delivery stages	Mitigation	n/a		Mar-26		
CIB13.4		Develop and agree a process that delivers a coordinated approach to highway works to minimise embodied carbon in scheme delivery	Mitigation	n/a		Mar-26		
CIB14.1	Identify changes required for drainage asset management to accommodate the changing climate	Carry out a review and implement changes to drainage asset management and service levels	Adaptation	18, 111, 113, 115		Dec-25		



Ref	Core action	Sub action	Mitigation/ Adaptation	Risks addressed	Co-benefits	Target date
Planning	and Policy					
LE1.1a	Ensure climate change	Directorates to ensure that impacts	Both			Jan-26
LE1.1b	and sustainability impacts are considered in decision	on climate change will be considered and incorporated into business plan	Both	C1		Jan-26
LE1.1c	making.	templates	Both	CI		Jan-26
LE1.1d			Both			Jan-26
LE1.2		Establish an emissions profile for the council's procurements	Mitigation	n/a		Dec-25
LE2.1	Continued liaison with Districts and Boroughs to discuss how planning considerations will include climate change mitigation and adaptation	Provide advice to encourage Local plan policies and proposals to have high regard to climate change mitigation and adaptation	Mitigation	n/a	Potential benefits include lower GHG emissions, pollution and material use, land requirements and other resource demands associated with development. Furthermore, there is potential for planning to contribute to greater resilience of communities and physical assets to climate change.	Ongoing
LE2.2		Provide sustainable transport accessibility assessments of potential Local Plan site allocations to help ensure that the most sustainable sites are brought forward in Local Plans, in line with National Planning Policy Framework (NPPF)	Mitigation	n/a		Ongoing
LE2.3		Agree measurable Travel Plan outcome targets with developers and monitor their delivery	Mitigation	n/a		Ongoing



Ref	Core action	Sub action	Mitigation/ Adaptation	Risks addressed	Co-benefits	Target date
LE3.1	Encourage renewable technologies in appropriate locations	Review the Staffordshire County Council policy position on renewable generation and identify renewable opportunities	Mitigation	n/a	Potentially enabling: Improved air quality (and public health) due to avoiding fossil fuel combustion Contributing to decarbonisation of the national electricity grid Contributing to greater energy security due to lower reliance on imports Job creation in renewable energy manufacturing, installation and maintenance Greater resilience of the energy system due to more diverse and distributed resource Opportunities for community wealth building e.g. if systems are community owned	Aug-25
LE4.1	Encourage stronger national policy direction and guidance on climate change	Respond to relevant consultations	Both	C1		Ongoing



Ref	Core action	Sub action	Mitigation/ Adaptation	Risks addressed	Co-benefits	Target date
Business	and Enterprise					
LE5.1	Identify and understand Staffordshire's net zero skills gaps and explore the levers and opportunities	Complete a Staffordshire green skills academy feasibility study	Both	E2	Job creation in lower carbon sectors	Jul-25
LE6.1	Work with businesses to raise awareness and	30 businesses to complete the Carbon Tracker tool per year	Mitigation	n/a		Dec-25
LE6.2		Develop an environmental policy template covering mitigation and adaptation considerations for start ups/ SMEs to adopt	Both	E1, E3, E4, E5		Mar-26
LE6.3		Develop guidance to assist businesses complete a climate change risk assessment	Adaptation	E1, E3, E4, E5	Supply chain resilience	Dec-25
LE7.1	Investigate opportunities for repurposing parts of BT street cabinets when analogue services are withdrawn and the requirement for power is reduced	Liaise with BT to identify opportunities to use power from cabinets for alternative use	Mitigation	n/a	Application of circular economy principles	Mar-27
LE8.1	Staffordshire Pension fund management to take proactive steps for climate reporting and management of climate- related risks.	Annual monitoring and reporting on the Staffordshire Climate Change fund against climate change criteria.	Both	C1		Annual



Natural environment and green spaces

Ref	Core action	Sub action	Mitigation/ Adaptation	Risks addressed	Co-benefits	Target date
NE1.1	Deliver proposal for Carbon Zero by Nature Project to sequester carbon through tree planting and land management modifications on Staffordshire County Council land based on completed carbon study.	Agree principles and approach through democratic process	Both	NE8, NE12	Potentially enabling: Improvements in local biodiversity Habitat creation and restoration of unique ecosystems Improvements in soil, air and water quality Reduced flood risk, protecting communities and infrastructure Opportunities for amenity and recreational space, with benefits to human health and wellbeing Employment, training and business opportunities related to nature conservation and management, forestry, ecological restoration and monitoring	May-25
NE2.1	Review policies that impact on our management of habitats	Review land management policies to consider options to lower carbon intensity, improve resilience of the natural environment and/or improve biodiversity as part of Natural Environment Strategy	Both	NE3, NE4, NE8, NE12		Oct-25
NE3.1	Using existing data evaluate potential sites for tree planting to minimise flood risk	Evaluate Wildlife Trust data and establish if any suitable pilot sites can be established	Both	NE3, NE8		Dec-25
NE4.1	Improve understanding on the condition of peat habit in Cannock Chase National Landscape	Complete a condition assessment of peatland habitat	Both	NE6, NE8		Mar-26
NE5.1	Increase awareness of wildfire risk in Country Parks and Cannock Chase National Landscape	Liaise with the communications team to deliver a wildfire risk communications campaign	Both	NE1	 Benefits to human health due to risk of injury from fire, avoided air pollution Avoided damage to natural environment Reduced carbon emissions from wildfire incidents 	Ongoing seasonal campaigns



Natural environment and green spaces

Ref	Core action	Sub action	Mitigation/ Adaptation	Risks addressed	Co-benefits	Target date
NE6.1	Commission research to identify high risk areas of the public rights of way (PROW) network where surface water flooding and other climate impacts may affect PROW and identify potential measures to address	Commission study to identify high risk areas, consider different approaches including more resilient specifications, alternative routes, information for users, etc.	Adaptation	NE7	Benefits to health and wellbeing from active travel and accessibility to greenspace	Mar-26
NE7.1	Develop an adaptation plan for Cannock Chase	Prepare an Adaptation plan for Cannock Chase National Landscape	Adaptation	NE1 - NE9		Mar-28
NE7.2	National Landscape and contribute to plan for Peak District National Park Authority (PDNPA)	Contribute to the development of the adaptation plan for the PDNPA	Adaptation	NE1 - NE9		Mar-28
NE8.1	Identify an approach to tree and woodland management and creation for Staffordshire	Develop a tree and woodland strategy for Staffordshire which considers the opportunities and consequences of climate change	Both	NE8	As NE1.1	Dec-28



Health, wellbeing and safety

Ref	Core action	Sub action	Mitigation/ Adaptation	Risks addressed	Co-benefits	Target date
HWS1.1	Provide alerts prior to extreme weather event	Deliver targeted communications to care providers via ASC Communications or ASC Incident Management dependent on the severity of extreme weather warnings and events.	Adaptation	H1, H2, H8		Ongoing
HWS2.1	Improve understanding of health impacts and climate change in	Work with partners such as the NHS and UKHSA to understand the changing risk to Staffordshire	Adaptation	H5		Ongoing
HWS2.2	Staffordshire	Raise awareness of tick related diseases on Country Parks and Cannock Chase National Landscape	Adaptation	H5		Ongoing seasonal campaigns
HWS3.1	Build climate change resilience in communities	Work in partnership with local groups to ensure community resilience programmes are in place for areas with greatest need	Adaptation	I1, I2, H1 - H4		Ongoing





Ref	Core action	Sub action	Mitigation/ Adaptation	Risks addressed	Co-benefits	Target date
Flood ris	k and water management					
WT1.1	Raise awareness and integrate climate adaptation into flood risk management	Develop education initiatives to support people's awareness of flood risk and their responsibilities in reducing it through personal property management	Adaptation	I1	As CIB 7.1	Dec-27
WT1.2		Identify projects to reduce surface runoff across catchments and working with a variety of landowners	Adaptation	I1, NE3, NE6, NE7, NE12		Dec-25
WT 2.1	Collaborate with relevant stakeholders to plan for future water needs	Engage with water companies and other relevant stakeholder to identify opportunities for greater partnership working	Adaptation	H13		Ongoing
Waste m	anagement					
WT3.1	Reduce waste by 1% year on year	Increase the tonnage of waste taken from HWRC sites by charities to redistribute to communities, forming a baseline tonnage to build on in 2026.	Mitigation	n/a	Enabling delivery of Circular Economy principles	Apr-26
WT3.2		Complete a business case for the reintroduction of bag splitting on HWRCs	Mitigation	n/a		Jul-25
WT3.3		Complete a composition analysis of waste on HWRCs and consider targeted communications to increase recycling based on results	Mitigation	n/a		Jun-25
WT4.1	Safeguard process identified for staff and visitors for extreme weather	Develop a procedure for triggering extreme weather processes on HWRCs	Adaptation	116, 117		Jul-25



Ref	Core action	Sub action	Mitigation/ Adaptation	Risks addressed	Co-benefits	Target date				
Travel an	Travel and transport									
WT5.1	Ongoing delivery against targets in the Bus Service Improvement Plan (BSIP)	Investigate opportunities for transition and rollout of zero emission buses	Mitigation	n/a	Potentially enabling improved air quality (and public health) due to avoiding fossil fuel combustion	Dec-25				
WT5.2		Annual monitoring of the number of individual bus passenger journeys	Mitigation	n/a	Understanding passenger movements can help to inform service improvement, maximise usage and reduce car journeys	Dec-25				
WT6.1	Maximise efficiency of home to school transport services	Shift 25% of users from contracted services to local services	Mitigation	n/a	Potentially enabling: Reductions in air and noise pollution Improvements in human health as a result of the above Lower congestion on the road network	Sep-28				
WT6.2		Reduce single occupancy taxis to at least 13%	Mitigation	n/a		Apr-25				
WT6.3		Develop an app using route mapping and scheduling information to show alternative routes when roads closed due to extreme weather	Adaptation	18		Sep-25				
WT7.1	Provide real time information for bus services	Develop App for buses and school travel information	Mitigation	n/a	Potentially reducing number of private vehicles on road enabling: Reductions in air and noise pollution Improvements in human health as a result of the above Lower congestion on the road network	Sep-25				



Ref	Core action	Sub action	Mitigation/ Adaptation	Risks addressed	Co-benefits	Target date
WT8.1	Reduce the number of pupils travelling to school in private vehicles	Better understand the barriers to low carbon travel for school journeys through annual surveys and pupil/ parent data to identify local solutions to increasing active travel	Mitigation	n/a	As WT7.1	Dec-25
WT8.2		Work with Sustrans to deliver a programme of School Streets where there are timed road access restrictions to motorised traffic at the start and end of the school day. The Pilot Phase includes 3 School Streets	Mitigation	n/a		Jul-25
WT8.3		Establish 15 new regular walking bus routes	Mitigation	n/a		Jul-26
WT9.1	Encourage sustainable	Pilot car share App for staff	Mitigation	n/a	Potentially reducing number of private	Sep-26
WT9.2	staff travel	Present the benefits for a corporate sustainable travel policy	Mitigation	n/a	vehicles on road enabling: Reductions in air and noise pollution Improvements in human health as a result of the above Lower congestion on the road network	Dec-25
WT10.1	Ongoing Deliver against objectives of the Local	Annual monitoring of available data to show walking and cycling trends	Mitigation	n/a	 Health benefits from more active travel Better Safety - A safe and reliable way 	Dec-25
WT10.2	Cycling and Walking Infrastructure Plan (LCWIP)	Deliver active travel schemes through the Highway and Transport Capital Programme	Mitigation	n/a	to travel for short journeys · Better Mobility - More people cycling and walking – easy, normal and enjoyable	Ongoing



Ref	Core action	Sub action	Mitigation/ Adaptation	Risks addressed	Co-benefits	Target date
Commur	nity engagement					
WT11.1	Community learning programmes to widely incorporate climate	Develop a 'green leaf' criteria to be displayed against courses to indicate sustainability elements	Both	H1, H2		ТВС
WT11.2	change aspects	Incorporate climate change education more widely across course content including mitigation, adaptation and impact on mental health	Both			Ongoing
WT12.1	Offer community funding for small scale climate change related projects	Offer an annual fund for climate change projects for schools, parish councils and the local community	Both	I1-I3, NE8, H1 - H4, H12		Apr-26
WT13.1	Reduce waste by 1% year on year	Develop external comms campaign to target reuse and zero waste principles – targeting 4000 individual interactions throughout 2025/26.	Mitigation	n/a	Enabling delivery of Circular Economy principles	Mar-26
WT14.1	Raise awareness of climate change and encourage behavioural change	Meet targets outlined in the 'Sustainability Internal Communications Plan 2025' in collaboration with the Sustainability Team.	Both	Theme dependent		Dec-25
WT14.2		Meet targets outlined in the 'Sustainability External Communications Plan 2025' in collaboration with the Sustainability Team.	Both	Theme dependent		Dec-25
WT14.3		Deliver camapigns that encourage reduced car travel and promote sustainable travel	Both	H6		Dec-25



Ref	Core action	Sub action	Mitigation/ Adaptation	Risks addressed	Co-benefits	Target date		
WT15.1	Engage with communities to raise awareness and highlight opportunities for local action for waste and climate change	Hold a Climate Change & Waste Conference	Both	Theme dependent		Oct-25		
WT16.1	Behaviour change campaigns that encourage reduced car travel and promote sustainable transport	Deliver three national campaigns that encourage reduced car travel and promotes sustainable transport	Mitigation	n/a		Apr-26		
Monitori	Monitoring and Evaluation							
WT17.1	Monitor and review action plan progress	Monitor plan quarterly and review actions and refresh annually	Both	n/a		Dec-25		



Appendix 2

The Climate Change Risk Assessment

Projected changes in climate

Table 1 shows the projected changes in climate for Staffordshire for the warming levels of 2 and 4 degree rises relative to 1982-2000 levels and informs the risk assessment. There is also a degree of uncertainty around the change so the 10th and 90th percentiles are also shown to outline the best and worst case scenarios.

	Recent past 2001 - 2020	2°C global warming level (advised to prepare)	4°C global warming level (advised to assess risk)
Temperature	°C	°C change	°C change
Summer maximum temperature	30.5 29.6 to 31.6	3.3 +2.2 to +5.2	6.9 +5.9 to +9.1
Summer average temperature	16.1 15.8 to 16.5	2 +1.4 to +2.6	4.1 +3.6 to +5.0
Winter average temperature	4.2 4.0 to 4.8	1.3 +0.6 to +1.6	2.7 +1.7 to +3.3
Winter minimum temperature	-6.6 -7.7 to 5.1	+2.5 +1.7 to +4.4	4.8 +3.7 to +5.9
Annual average temperature	9.9 9.8 to 10.1	1.6 +1.2 to +1.8	3.3 +2.9 to +3.8
	Number of days	Number of days	Number of days
Days above 30°c	2 2 to 3	4 2 to 6	13 10 to 21
Days above 35°c	0 0-1	0 0-1	2 2-4
Precipitation	%	% change	% change
Summer precipitation rate	1.98 1.79 to 2.19	-11 -22 to -3	-28 -43 to -21
Winter precipitation rate	2.32 2.13 to 2.67	6 -1 to +15	17 +11 to +25



Risk	Risk	Opportunity	Urgency UK CCRA3	SCC Risk		future magnitude isk/opportunity fo	
Code	(including indirect and interdependency risk)	or Threat	defined	Rating	Present day	2050 2°c rise by 2100	2050 4°c rise by 2100
I1	Damage to council, residential and business properties from flooding	Т	action needed	Major	High	High	High
12	Damage to council, residential and business properties and building fabric from storms (excluding floods), driving rain, wetter winters and wildfires	Т	action needed	Moderate	Medium	Medium	Medium
13	Overheating of properties, infrastructure and mobile libraries during heatwaves. Potential need for increased cooling.	Т	action needed	Moderate	Low	Medium	Medium
14	Milder winters may reduce building heating requirements, cold weather related damage and associated maintenance costs	О&Т	future/ watching brief	Minor	Low	High	High
15	Increased risk of damage to cultural heritage	Т	action needed	Moderate	Medium	Medium	High
16	Risk to digital connectivity from extreme weather conditions (storms, floods, extreme temperatures)	Т	further investigation	Major	Medium	Medium	Medium
17	Utility infrastructure (energy & water supply) damaged/outages by extreme weather (heat, floods, drought, storms) or chronic changes to climate leading to service disruption as well as possible related impacts on other infrastructure systems	Т	action needed	Major	High	High	High
18	Damage or closures to major road or rail infrastructure from weather related incidents (flooding, tree fall etc)leading to service disruption and impact on communities and businesses	Т	action needed	Major	High	High	High



Risk	Risk (including indirect and interdependency risk)	Opportunity	Urgency UK CCRA3 defined	SCC Risk Rating		future magnitude isk/opportunity fo	
Code		or Threat			Present day	2050 2°c rise by 2100	2050 4°c rise by 2100
19	Pavement failure due to more extreme weather and change to freeze thaw cycles	Т	action needed	Major	Medium	High	High
110	Slope and embankment failure along road networks	Т	action needed	Major	Medium	Medium	Medium
111	Failure of highways structures from flooding, heat and rain.	Т	further investigation	Major	Medium	Medium	Medium
l12	Impacts of the changes in timings of seasonal events and more extreme weather for highway maintenance and enhancement works	Т	action needed	Major	High	High	High
I13	Changing climate could cause premature failure of highways assets	Т	action needed	Major	High	High	High
114	Milder winters may change highways winter service delivery	O/T	Not identified in CCRA	Moderate	not rated by CCRA3		
I15	Changing climate impacts on overall management of highways network	Т	action needed	Major	High	High	High
116	Risk of fire at HWRC in waste and recycling skips	Т	Not identified in CCRA	Major		not rated by CCRA	3
117	Risk to public on HWRCs due to high winds and flooding	Т	Not identified in CCRA	Moderate	High	High	High
I18	Rogue traders - taking advantage of consumers damaged homes/property. Pressure selling, misselling, false / inaccurate claims for goods and services, overcharging.	Т	Not identified in CCRA	Moderate	not rated by CCRA3		
l19	Risks to development, regeneration, maintenance and other construction work due to extreme weather	Т	Not identified in CCRA	Major		not rated by CCRA	3



Natural environment and green spaces

Risk	Risk	Opportunity	Urgency UK CCRA3 defined	SCC Risk Rating		future magnitude sk/opportunity fo	
Code	(including indirect and interdependency risk)	or Threat			Present day	2050 2°c rise by 2100	2050 4°c rise by 2100
NE1	Increased frequency of wildfires putting terrestrial species and habitats at risk	Т	action needed	Major		d as wildfires are no their own risk in CC	
NE2	Changes in timings of seasonal events and extreme weather has changed the time windows for management maintenance and enhancement work and agricultural production	Т	action needed	Major	High	High	High
NE3	Changing climatic conditions and extreme events, including temperature change, water scarcity, flooding, wind, and altered hydrology impacting terrestrial and freshwater species and habitats	Т	action needed	Major	High	High	High
NE4	Terrestrial and freshwater species and habitats at risk from pests, pathogens and invasive species	Т	action needed	Moderate	High	High	High
NE5	Cycles of drought and wet weather and pests and disease may compromise tree health	Т	action needed	Moderate	Medium	High	High
NE6	Damage to soils from seasonal aridity and wetness	Т	action needed	Major	Medium	High	High
NE7	Erosion of and other damage to footpaths and associated infrastructure due to storms, fallen trees, drought and other extreme events	Т	action needed	Moderate	Medium	High	High
NE8	Opportunities for natural carbon stores, carbon sequestration and natural cooling and flood risk management. Risk to natural carbon stores from climate hazards such as fire, flood, pest and diseases.	O&T	action needed	Major	Medium	High	High



Natural environment and green spaces

Risk	Risk	Opportunity	Urgency	SCC Risk Rating	Estimated future magnitude of mapped CCRA3 risk/opportunity for England		
Code	(including indirect and interdependency risk)	or Threat	UK CCRA3 defined		Present day	2050 2°c rise by 2100	2050 4°c rise by 2100
NE9	Opportunities for increased visitors due to drier warmer summers. Increased visitors could also lead to greater land management pressures	0	further investigation	Major	Low	Medium	Medium
NE10	Changes to agricultural productivity from extreme events and the changing climate, including heat, flooding, wildfire, pests, pathogens and diseases.	Т	action needed	Moderate	Medium	High	High
NE11	Animal welfare from severe weather	Т	action needed	Moderate	Medium	High	High
NE12	Opportunities for land management, new species, changes to agricultural practices	0	further investigation	Moderate	Medium	High	High





Health, wellbeing and safety

Risk	Risk	Opportunity	Urgency	SCC Risk	Estimated future magnitude of mapped CCRA3 risk/opportunity for England			
Code	(including indirect and interdependency risk)	or Threat	UK CCRA3 defined	Rating	Present day	2050 2°c rise by 2100	2050 4°c rise by 2100	
H1	Excess deaths or heat related illness, especially the vulnerable during heatwaves	Т	action needed	Moderate	High	High	High	
H2	Extreme cold, damp and mould and associated illness or death especially for those living in fuel poverty. Potential benefits to health from reduced frequency of cold weather. Risks and opportunities from summer and winter household energy demand.	T&O	action needed	Moderate	Low	High	High	
Н3	Mental health issues from climate related impacts (flood, storm damage, extreme heat etc) and potential risk to life. Potential benefit to mental health from warmer weather and greater opportunities to be in the outdoors.	T&O	action needed	Major	High	High	High	
H4	Widening health inequalities from extreme weather conditions and long-term climate change	Т	action needed	Moderate	ı	not rated by CCRA	3	
Н5	Greater incidence of vector borne and infectious diseases	Т	action needed	Moderate	Medium	Medium	Medium	
Н6	Risk to health and wellbeing due to changes in indoor and outdoor air quality	Т	further investigation	Moderate	High	Medium	Medium	
Н7	High temperatures and more frequent exposure to heat will increase risk of heat stress and UV exposure, particularly to outdoor and mobile staff.	Т	action needed	Moderate	High	High	High	



Health, wellbeing and safety

Risk	Risk	Opportunity	Urgency UK CCRA3 defined	SCC Risk	Estimated future magnitude of mapped CCRA3 risk/opportunity for England			
Code	(including indirect and interdependency risk)	or Threat		Rating	Present day	2050 2°c rise by 2100	2050 4°c rise by 2100	
Н8	Challenges to delivery of health and social care during extreme weather events	Т	action needed	Moderate	Medium	Medium	Medium	
Н9	Staff responding to extreme weather events such as storms or wildfires are in high risk situations	Т	action needed	Moderate	Medium	Medium	Medium	
H10	Utility infrastructure damaged by extreme weather leading to service disruption and public health issues (not SCC care homes).	Т	action needed	Moderate	Medium	Medium	Medium	
H11	Higher temperatures affecting food safety and food borne disease cases. Changing climate could impact food security (local and global supplies)	Т	action needed	Major	High	High	High	
H12	Drier warmer summers provides greater opportunity to use outdoor spaces	Т	further investigation	Moderate	Low	Low	Low	
H13	Risks to public water quality and supplies from drought and low river flows	Т	further investigation	Moderate	Medium	Medium	Medium	
H14	Risks to schools closures and education provision from extreme weather putting pressure on services providing safeguarding and welfare checks	Т	action needed	Moderate	Medium	Medium	Medium	



Risk	Risk	Opportunity	Urgency UK CCRA3	SCC Risk	Estimated future magnitude of mapped CCRA3 risk/opportunity for England			
Code	(including indirect and interdependency risk)	or Threat	defined	Rating	Present day	2050 2°c rise by 2100	2050 4°c rise by 2100	
E1	Risks and opportunities to businesses from changing weather patterns.	O & T	further investigation	Moderate	High	High	High	
E2	Potential skills gap as the demand for Green Economy and Ecosystem Services increases	O & T	further investigation	Major	Medium	Medium	Medium	
E3	Reduced employee productivity due to infrastructure disruption and higher or lower temperatures in working environment	Т	further investigation	Moderate	Low	Medium	Medium	
E4	Risk and opportunities for business from changes in demands for goods and services	O & T	further investigation	Moderate	Medium	Medium	Medium	
E 5	Disruption to supply chains, possibly including essential goods such as food and pharmaceuticals	Т	action needed	Moderate	Medium	as evidence	Rated as unknown in CCRA3 as evidence base is too uncertain to assess	
E 6	Price volatility for materials and commodities, including possible impacts on essentials like food and energy security	Т	action needed	Moderate	High	Medium	High	
E7	Increased risk to business from water scarcity	Т	further investigation	Moderate	Low	Medium	Medium	



SCC corporate processes and governance

Risk	Risk	Opportunity or Threat	Urgency UK CCRA3 defined	SCC Risk Rating	Estimated future magnitude of mapped CCRA3 risk/opportunity for England		
Code	(including indirect and interdependency risk)				Present day	2050 2°c rise by 2100	2050 4°c rise by 2100
E8	Risks to finance, investment and insurance including access to capital for businesses	Т	further investigation	Moderate	Medium	Medium	High
C1	Decision making and risk assessment processes do not fully consider climate change implications	Т	N/A	Major	not rated by CCRA3		
C2	Risks to finance, investment and insurance including access to capital	Т	future/ watching brief	Moderate	Medium	Medium	High





References

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MET Office Climate Data Portal <u>Local Authority | The</u>

Met Office climate data portal

Climate Just Map Tool ClimateJust