

## **Climate Adaptation – “it's in our nature”**



**Jim Davies,**  
**Senior Advisor (Local Nature Recovery Strategies)**  
**National Office Sustainable Places**



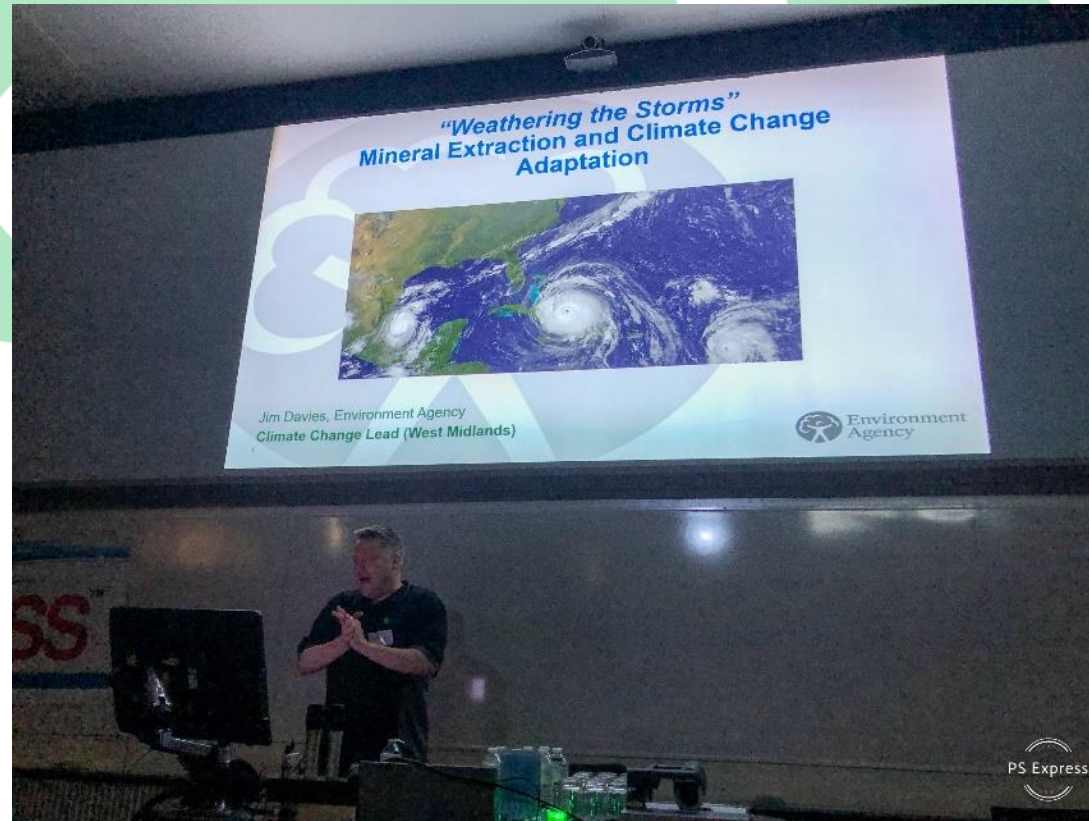
**West Midlands**  
Combined Authority



**Environment**  
Agency



# Geologist, Planner and Nature Convert.....





# Environment Agency





# Environment is key..





# Government Environmental Policy Drivers

## Nature Recovery Network

[Time to press the accelerator on the road to Nature recovery](#)

Tony Juniper, 22 January 2024 - [Biodiversity](#), [Climate change](#), [Landscapes](#), [Natural England](#), [Nature Recovery Network](#), [Wildlife](#)



## 30 by 30: a boost for nature recovery

Natural England, 11 December 2023 - [Biodiversity](#), [Biodiversity Net Gain](#), [Climate change](#), [Environment Act](#), [Green Infrastructure](#), [Landscapes](#), [Landscapes and access](#), [Moorlands](#), [Marine Net Gain](#), [Monitoring](#), [National Nature Reserve](#), [Natural Capital](#), [Natural England](#), [Nature Recovery Network](#), [Parks, trails and nature reserves](#), [Protected sites and species](#), [Science and evidence](#), [Site of Special Scientific Interest](#), [Special Protection Area](#), [Species recovery](#), [Wildlife](#), [wildlife and farming](#)



Written by James Markwick Principal Adviser, Biodiversity Policy After a year



## Biodiversity Net Gain

An introduction to the benefits

HM Government

## Environmental Improvement Plan 2023

First revision of the 25 Year Environment Plan

Department for Environment Food & Rural Affairs

## Our integrated plan for delivering clean and plentiful water

Environment Agency

## National Flood and Coastal Erosion Risk Management Strategy for England

## Meeting our Future Water Needs: a National Framework for Water Resources

## Thriving for the Future

Forestry Commission Strategy 2023-28

## LEVELLING UP

## Green Infrastructure Guidance



- Figure 14:
1. In stream structures for example woody debris
  2. Blocking of moorland drainage channels
  3. Woodland planting
  4. Land and soil management practices, cover crops, hedgerows, suitable crops
  5. River morphology and floodplain restoration for example removal of embankments
  6. Inland storage ponds and wetlands
  7. Protecting riverbanks for example stock fencing
  8. Sustainable urban drainage systems for example swales, wetlands in urban areas, green roofs, permeable pavements, detention ponds, filter strips
  9. Saltmarsh restoration
  10. Coastal managed realignment

## £25 million funding announced for Natural Flood Management projects

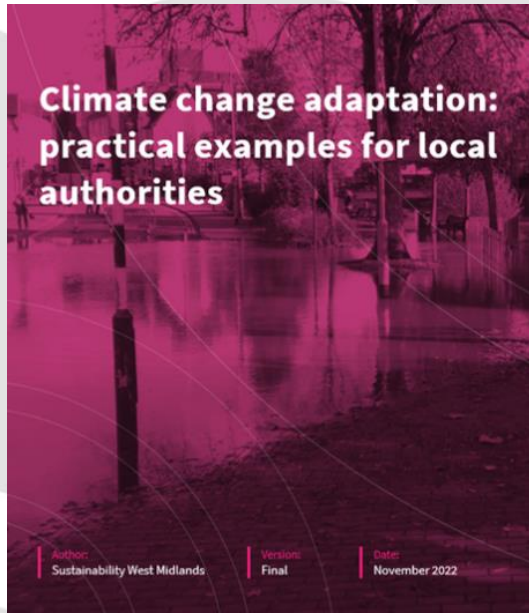
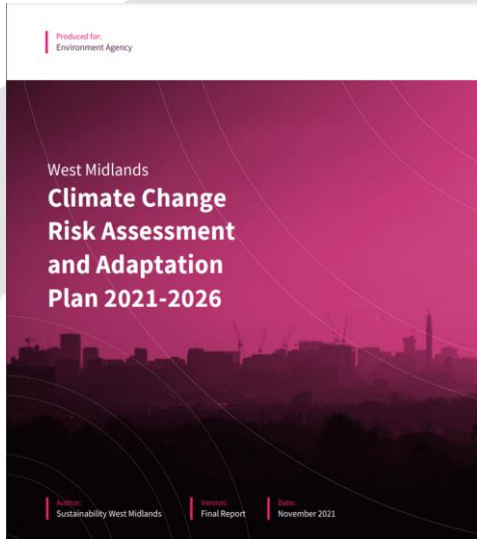
## Green Infrastructure Guidance

www.naturalengland.org.uk

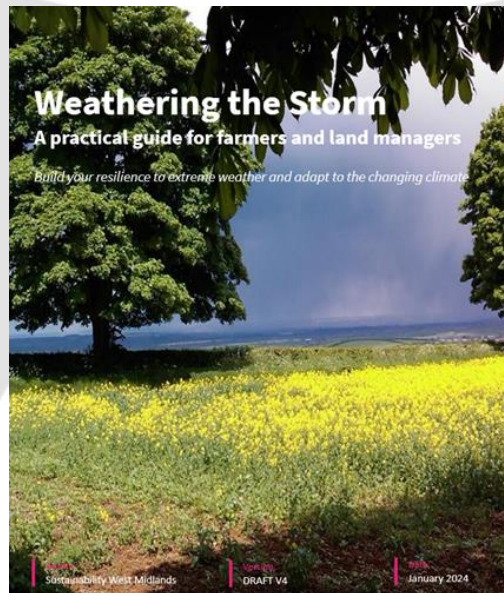
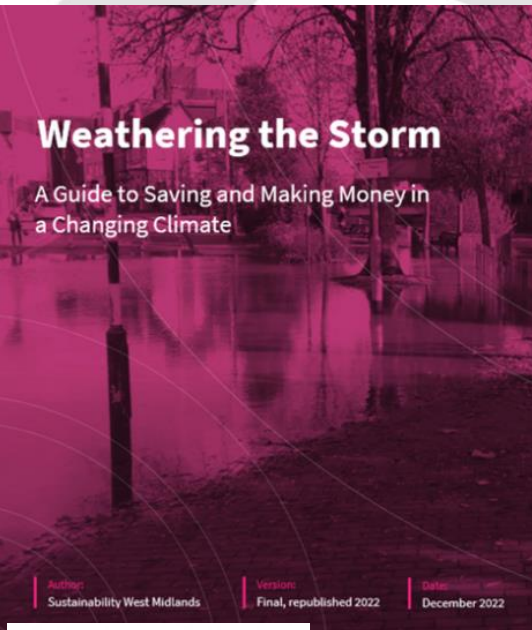
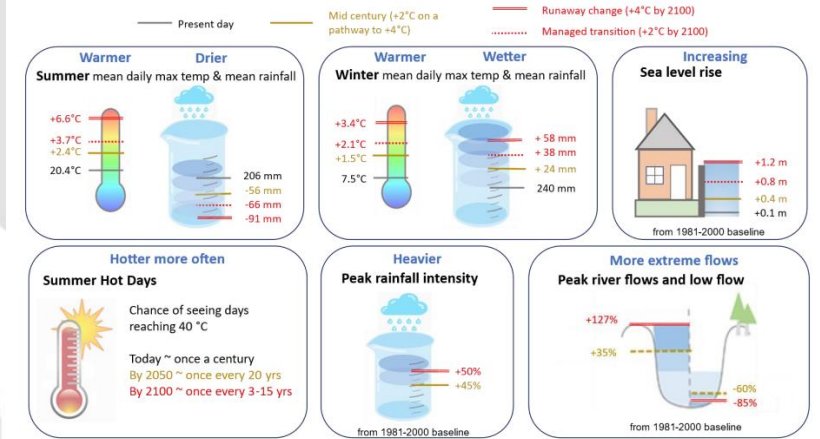
NATURAL ENGLAND



# Climate Change Adaptation support



## Climate impacts tool – Part 1: Physical impacts



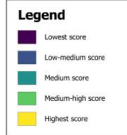
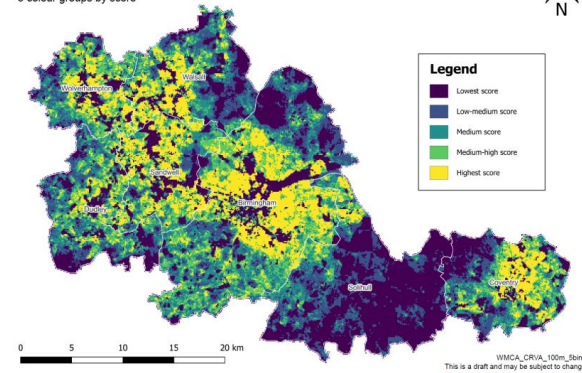


# Tackling deprivation, creating resilient communities...

## Climate Risk & Vulnerability Assessment (CRVA) mapping

Climate risk and vulnerability scores for the West Midlands

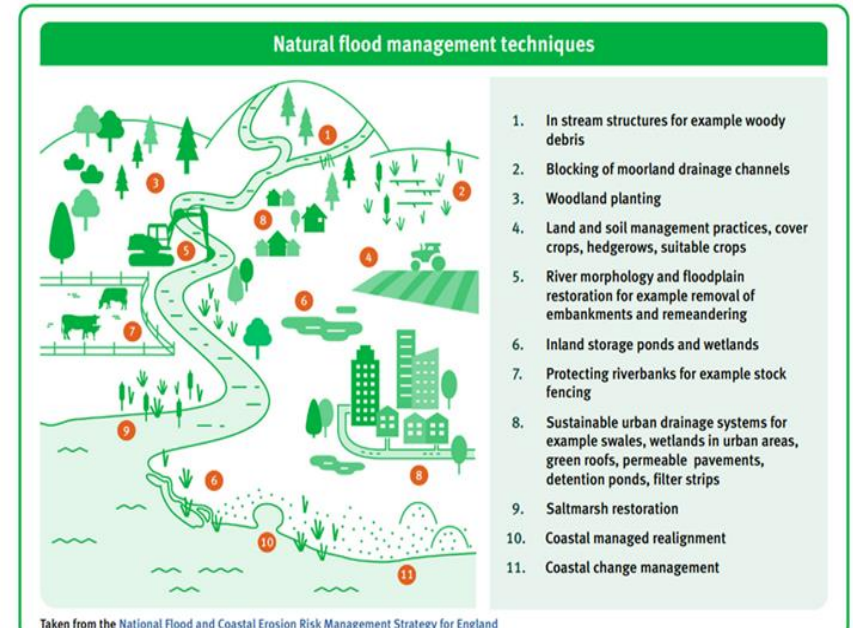
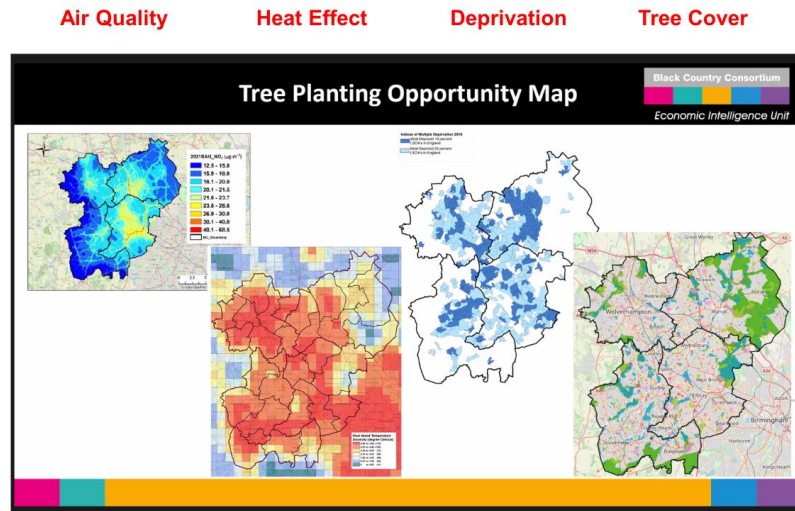
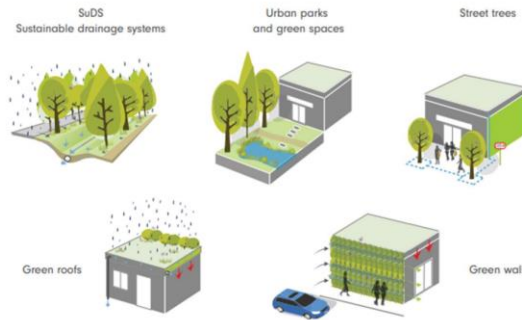
100m resolution  
5 colour groups by score



Black Country iTree- Regeneration and Climate Adaptation

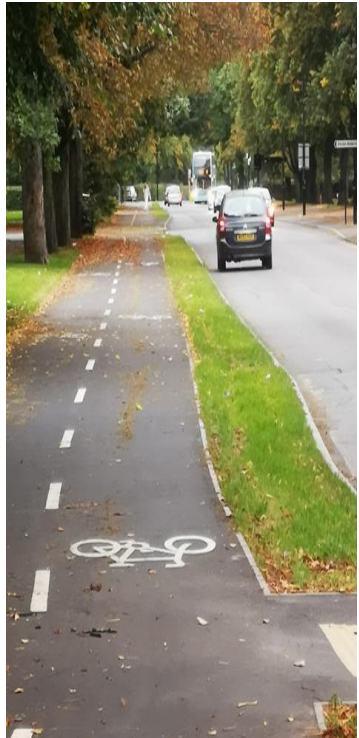


## Nature-based solutions (NBS) for the built environment





# Nature Based Regeneration and Resilient Communities



- Urban heating and air pollution;
- replenish groundwater resources;
- contribute to biodiversity net gain targets;
- capture and re-use rainwater;
- Contaminated Land
- Brownfield Land
- store carbon;
- reduce the need for carbon-intensive construction techniques and pumped systems;
- release capacity in combined sewerage systems and at wastewater treatment works;
- create and connect valuable areas of blue-green infrastructure
- reduce lifetime maintenance costs; and
- enhance the attractiveness and value of new development by integrating water management with habitat for wildlife and opportunities for amenity and recreation.



# Planning and Planners.

*..”organise, design and make decisions on where new homes, roads, schools, shops and all the other things we need to live and work should be built.*

*At the same time, town planners try to make towns, cities and the countryside attractive, safe and environment friendly.*

*They are at the heart of discussions with local communities, businesses and politicians..”*

**Enablers of Sustainable Development – on the front line of climate change adaptation and instigating socio-economic betterment,**

*Planning Applications  
‘Strategic Planning – Local Plans’*

**National Planning Policy Framework (Government)**



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# LNRS - Nature and Planning

- **Planning –**

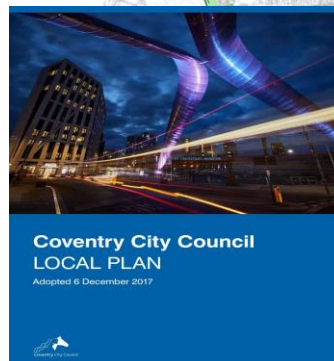
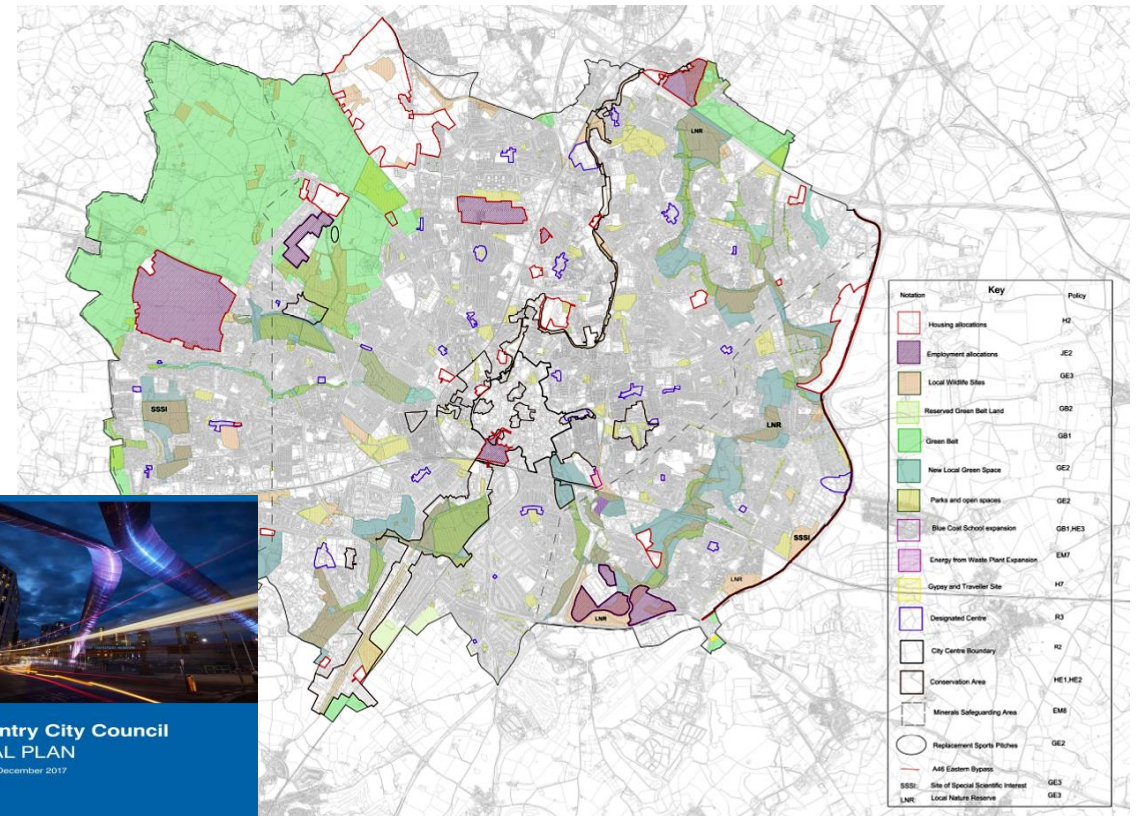
- When describing the strategy area, responsible authorities should draw on other relevant spatial plans.

- Housing/Employment Land
- Minerals and Waste
- Infrastructure Plans
- Climate Change Adaptation Plans and Risk Assessments.
- Brownfield Land

- **Use Existing Data –**

- Catchment plans, Tree and Woodland Strategies, GI Strategies – these can help you, they can provide you with:

- Data identifying key assets and opportunities in your area
- Priorities and measures that have already been agreed.
- Contaminated Land





# Longbridge – Green Infrastructure



Environment  
Agency



# River Rea Quarter



## Connaught Square



## Warner Fields





# Moving the Trent!

**Integrated multiple partners –**

**Reduced flood risk** to the Victoria Ground site as channel has larger capacity (stays in channel in the extreme event)

**Environmental betterment** from a biodiversity/habitats perspective with the inclusion of riffles and pools, natural material in the river.

**More viable site/more housing**

**More ‘natural’ development (resilient)**

**Well-being/Green Space**

**Contaminated Site Cleaned Up**

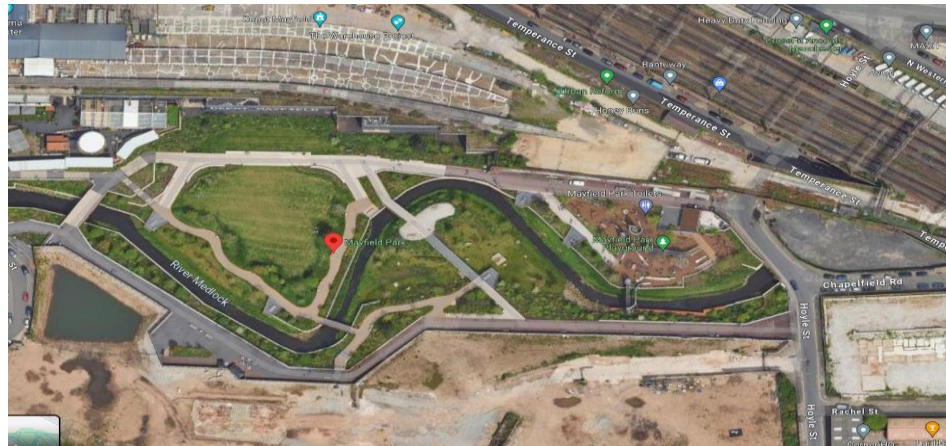
**Award Winning development!**



**Environment  
Agency**



# Mayfield Park – Manchester Restoring the River Medlock



The open space is flood storage, providing twelve Olympic swimming pools worth of flood water storage and managing risk plus CC onsite.



# 20-minute Neighbourhoods/15minute Cities

## COMPLETE, COMPACT AND CONNECTED PLACES

- The 20-minute neighborhood concept is all about 'living locally'
- The idea of the '20-minute neighbourhood' (also known as 15-minute cities) has grown with interest around the world, especially since the COVID-19 pandemic put a spotlight on the importance of the liveability of where we live.
- giving people the ability to meet most of their daily needs within a 20-minute walk from home, with access to safe cycling and local transport options.
- Places where everyone can thrive without having to use a car.
- 10 minutes there, and 10 minutes back.
- Concept out of **Melbourne, Paris**



Working with partners including Sport England, Sustrans, the Design Council, Fields in Trust, CLES and others





# Binley Road 'Mega' Cycle Way (Coventry)

- **Improves physical health** - Exercise
- **Improves social inclusion** - access to safe cycling facilities enables more people to take part in society by improving the ability and opportunity to travel
- **Improves mental health** - Cycling can reduce stress, ease anxiety and reduce the risk of depression.
- **Improves access to employment, education and leisure** - cycling takes you from door to door.

**Provides 'Green Space'**

**Greenery – Nature, Trees, Urban Heat, Well-being**

**SuDS – Water Management**

**Multi-functional**





# Sustainable, Resilient, Adaptive Integration is essential





# Brownfield v Greenfield...?

