

'A CITY'S FUTURE IS A CITY'S PARKS'

"Metanoia"

Biophilic

Natural Capital

Stress

Ecosystem services

Birmingham City Council

Leader- leading global green city;

Planning-

150,000 population;
80,000 new homes;

Presentation

1. Context

2. Evidence

3. Change

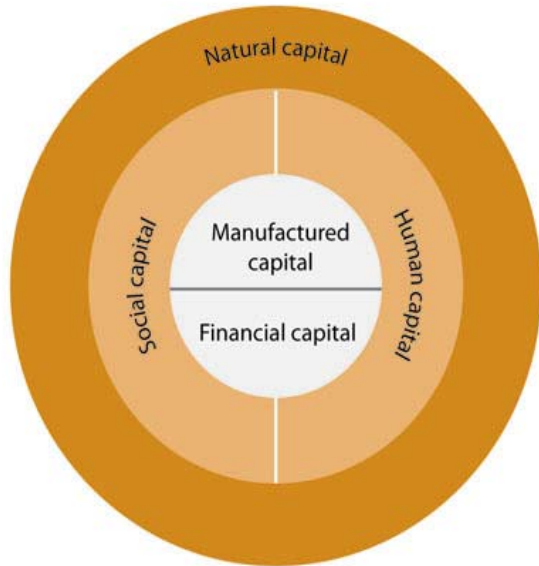


Nick Grayson

Climate Change & Sustainability Manager,



'A CITY'S FUTURE IS A CITY'S PARKS'



Source: Forum for the Future (2013)
Five essential capitals for human wellbeing

"We the mayors and governors of the world's leading cities. ask you to recognise that the future of our globe will be won or lost in the cities of the world."

Copenhagen Climate Change communiqué, December 2009



The Global Commission on the Economy and Climate
20th September 2014 –Stern....“15 Years”

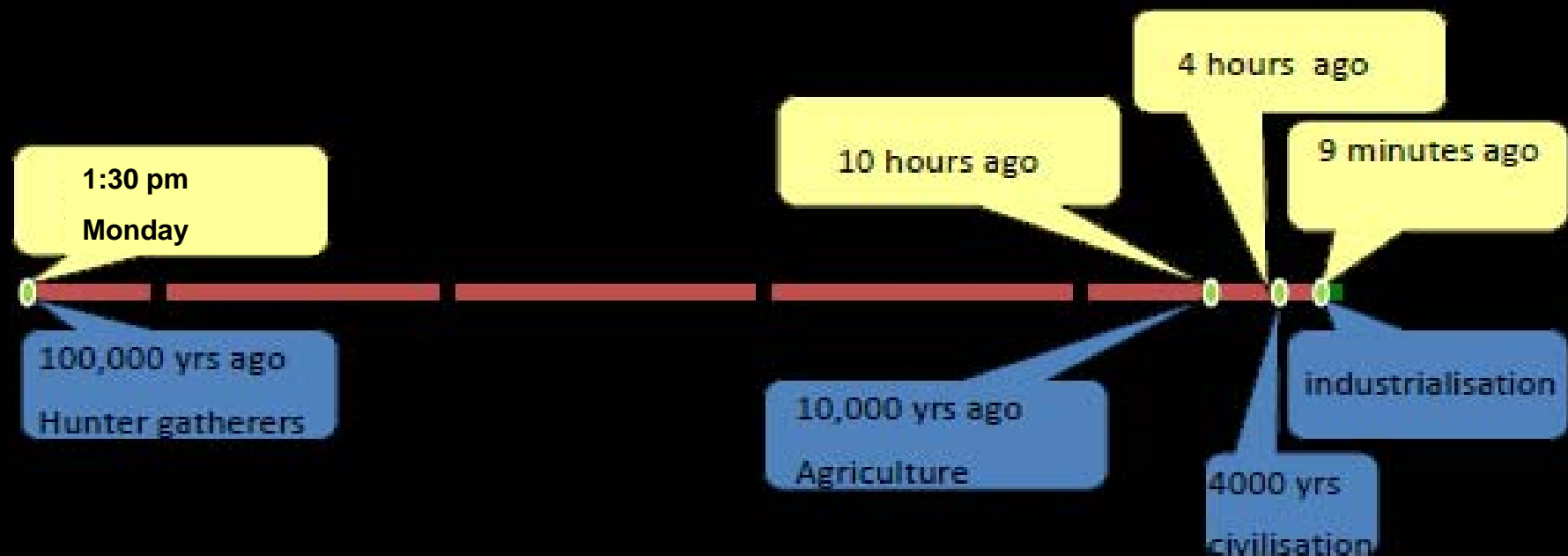


2006 Report

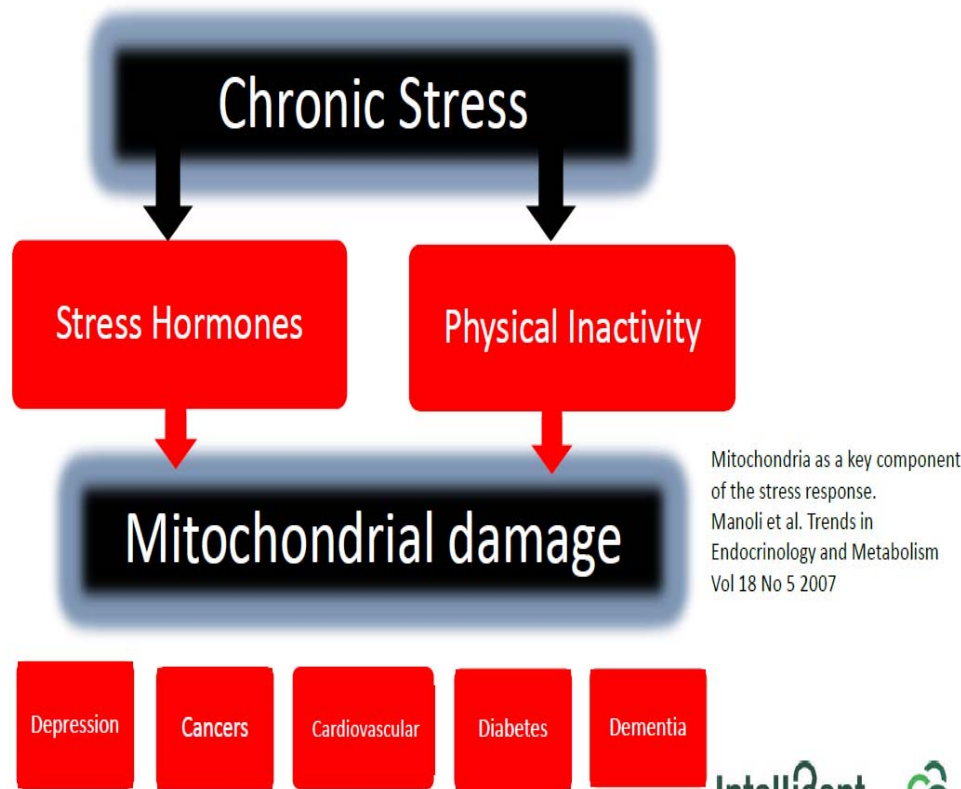
1% of global GDP

'A CITY'S FUTURE IS A CITY'S PARKS'

If we take an hour to equal 1000 years then from **Monday** to now is 100,000 years; the time from the origin of mankind to today.



'A CITY'S FUTURE IS A CITY'S PARKS'



Non-communicable diseases represent a new frontier in the fight to improve global health. Worldwide, the increase in such diseases means that they are now responsible for more deaths than all other causes combined. Secretary General United Nations 2011

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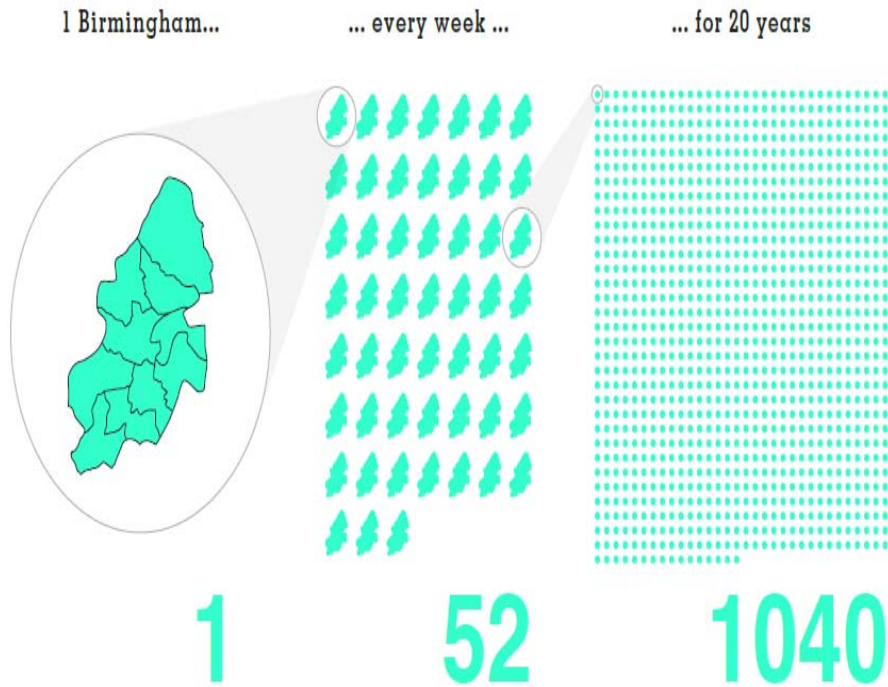


SUSTAINABLE CITIES INDEX

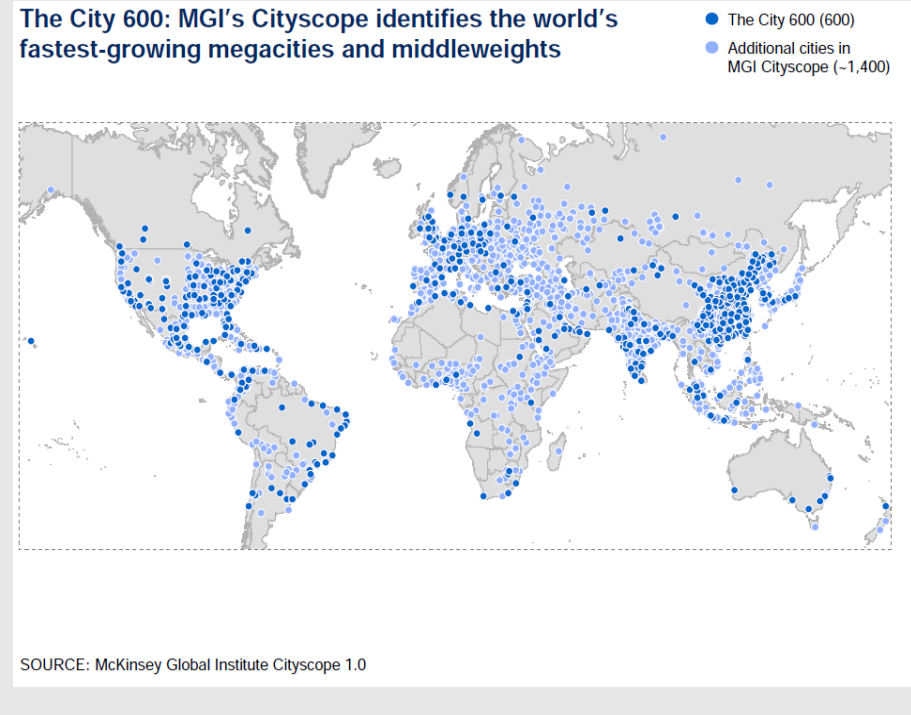
2015
Balancing the economic, social and environmental needs of the world's leading cities



'A CITY'S FUTURE IS A CITY'S PARKS'



We need to build the equivalent of one Birmingham a week around the globe for the next 20 years if we are to house the growing urban populations.

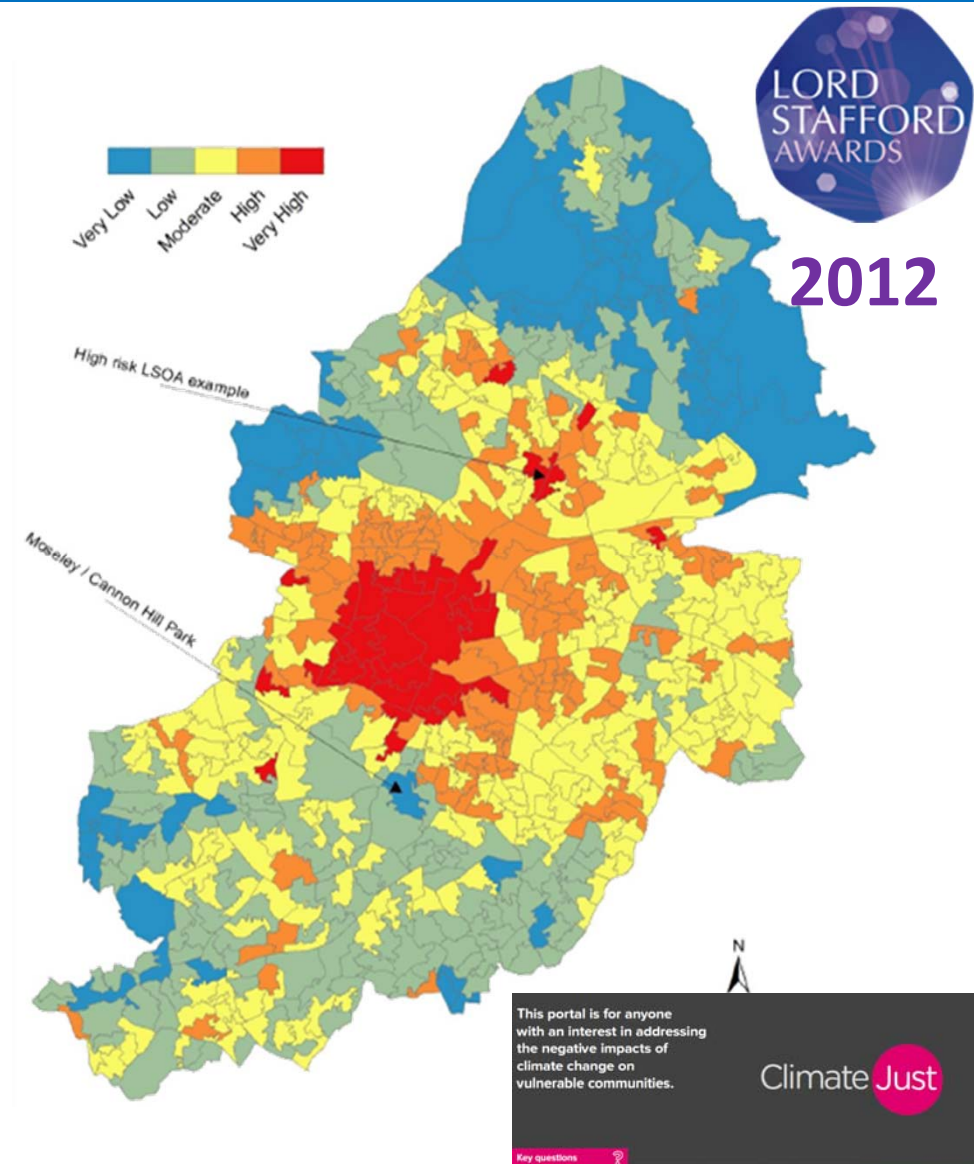
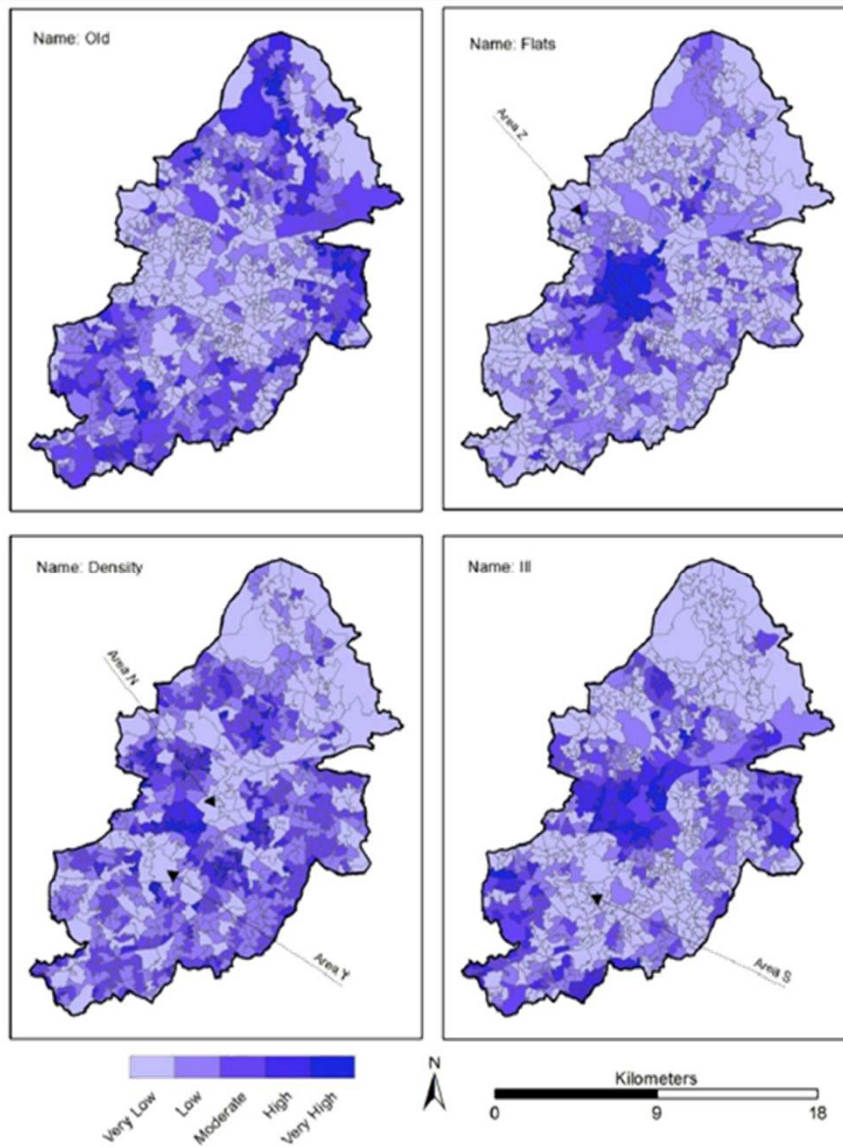


GREEN GROWTH AGENDA

RETROFITTING CITIES

SUSTAINABLE HEALTHCARE

BUCCANEER – Birmingham Urban Climate Change Adaptation Neighborhood Estimates of Environmental Risk



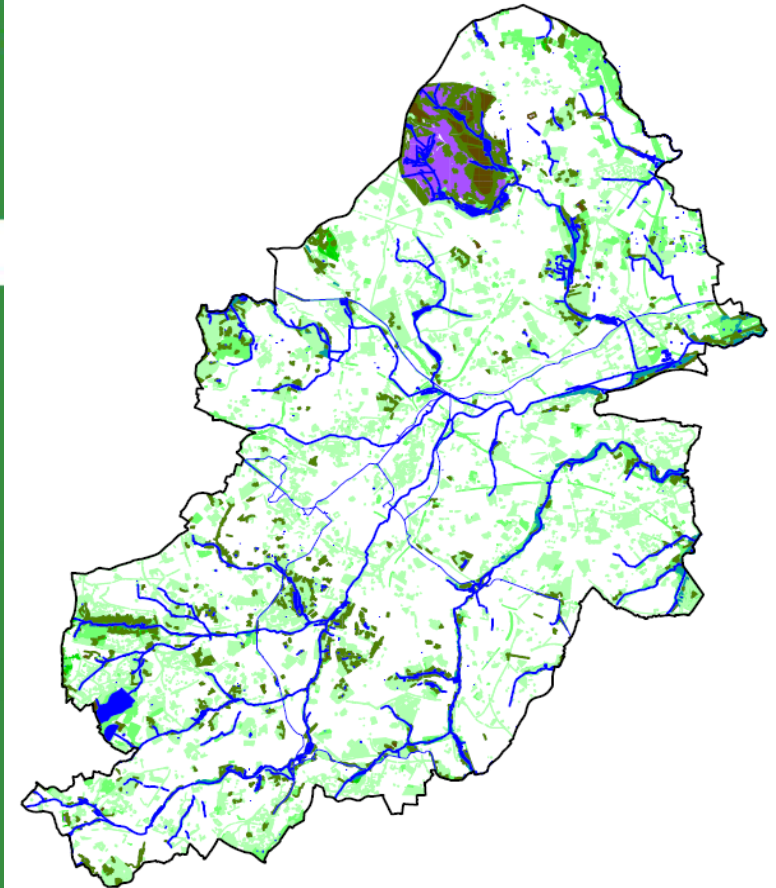
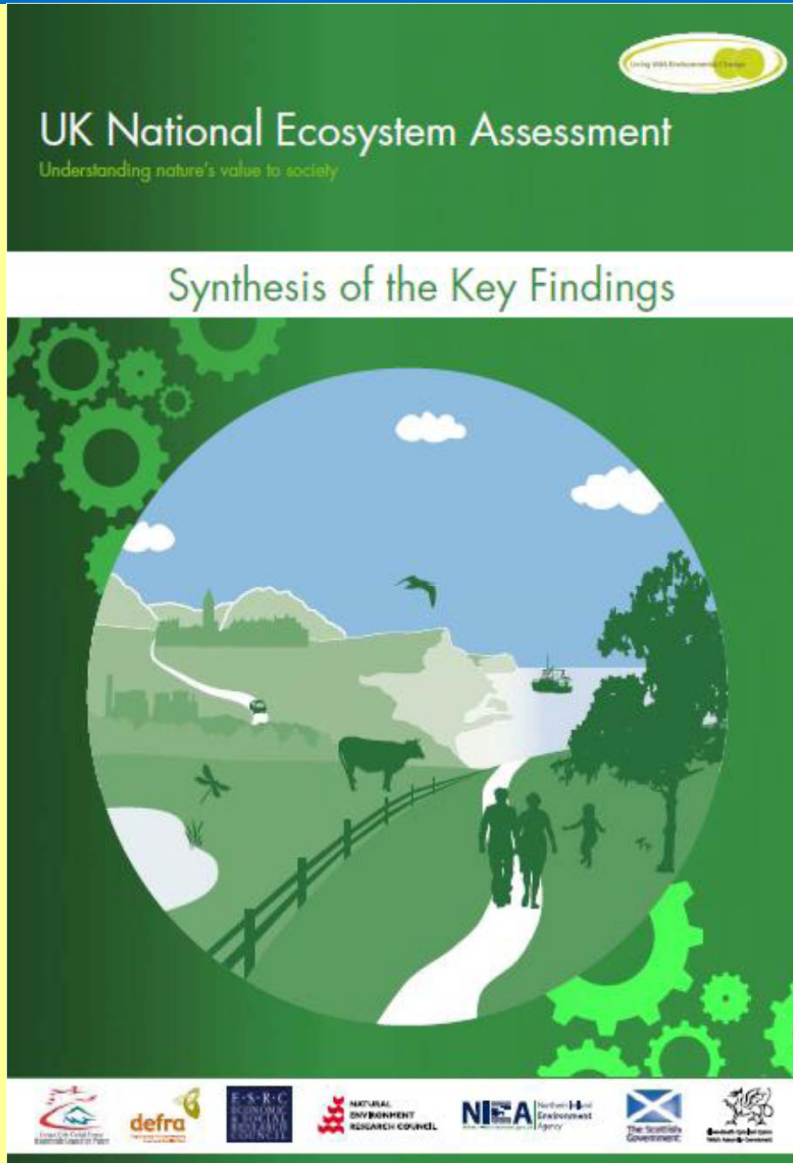
'A CITY'S FUTURE IS A CITY'S PARKS'

“The UK NEA provides a comprehensive overview of the state of the natural environment in the UK and a new way of estimating our national wealth”

Foreword

Lord Selbourne
2011

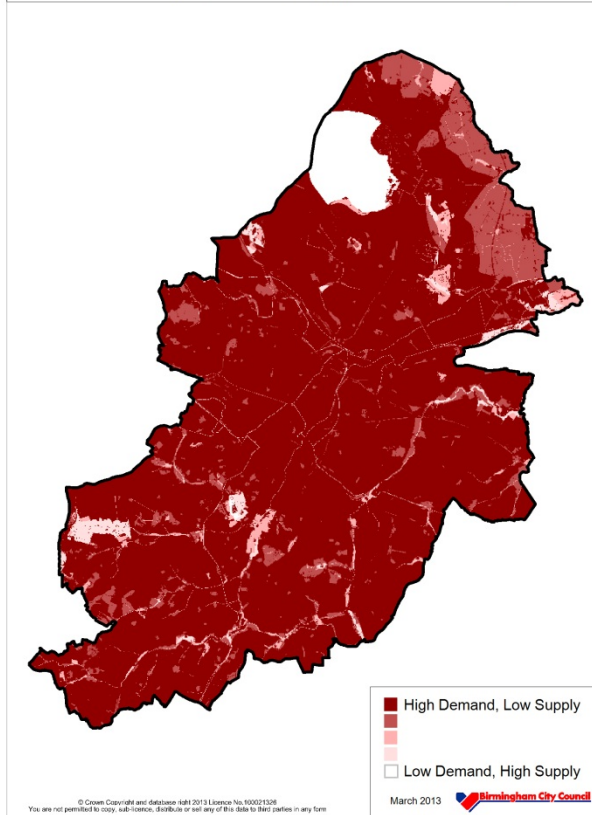
- *Regulating;*
- *Provisioning*
- *Cultural;*
- *Supporting;*



Birmingham – a UK first
UNESCO Biosphere Reserve
Core, Buffer, Transition

'A CITY'S FUTURE IS A CITY'S PARKS'

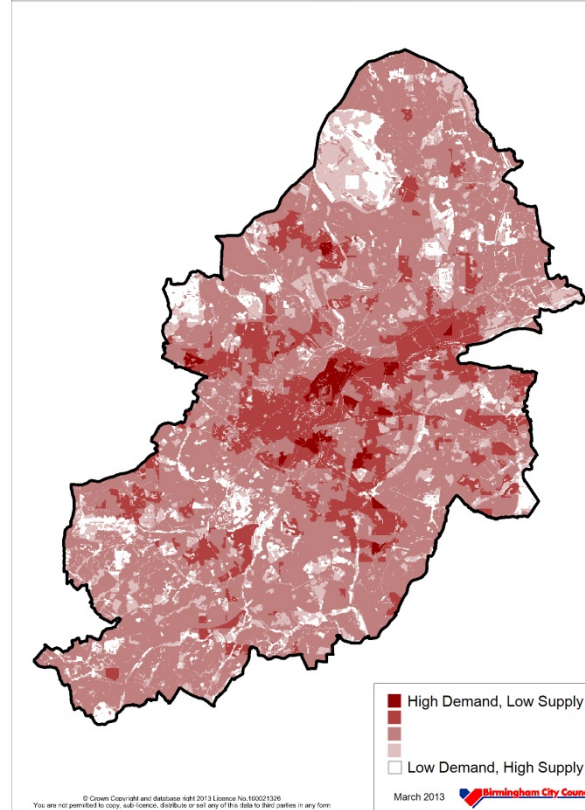
Biodiversity Services Supply and Demand map



• Biodiversity

• Education

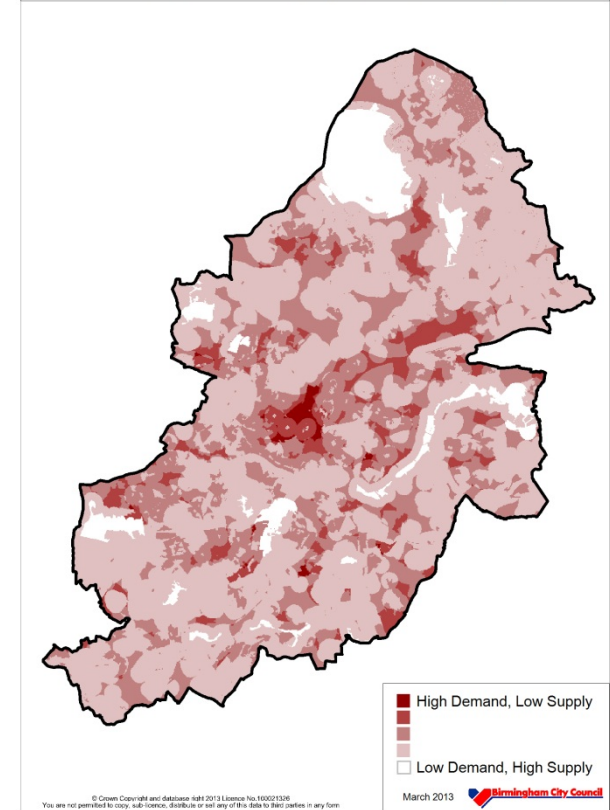
Local Climate Services Supply and Demand map



* Local Climate

* Aesthetics & mobility

Recreation Services Supply and Demand map

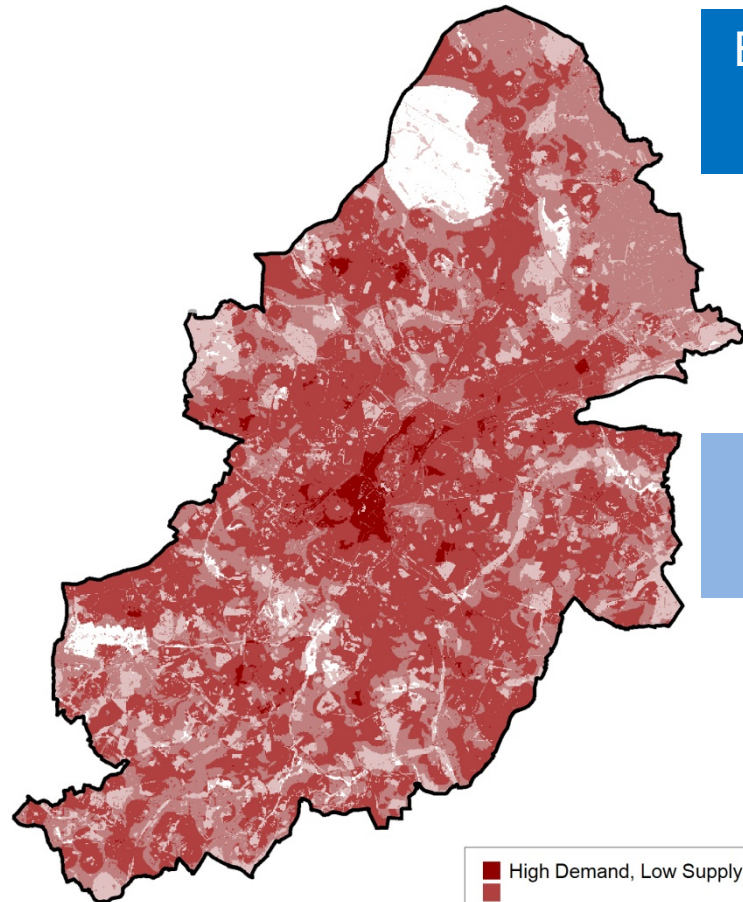


* Recreation

* Flood risk

'A CITY'S PARKS IS A CITY'S FUTURE'

The Multi-layered Challenge map for Birmingham



■ High Demand, Low Supply
■ Low Demand, High Supply

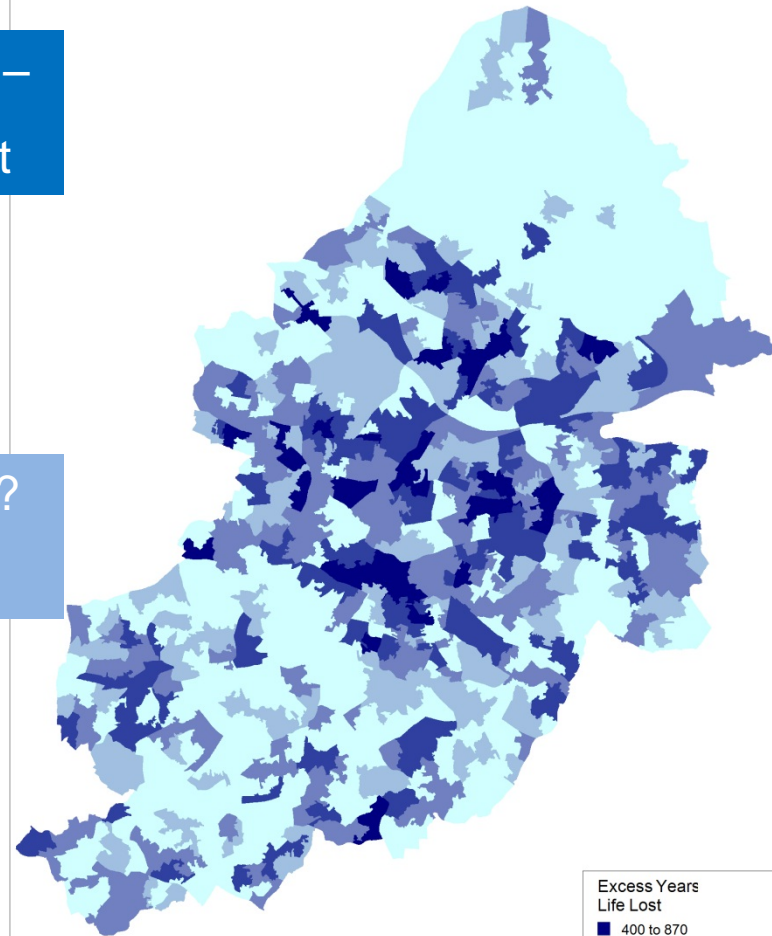
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March 2013 Birmingham City Council

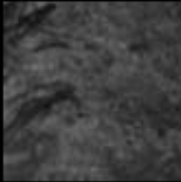











Birmingham –
a global first

Manchester?
New York?

Excess Years Life Lost at LSOA



**Excess Years
Life Lost**
■ 400 to 870
■ 200 to 400
■ 100 to 200
■ 0 to 100
■ -400 to 0

Principle	Outcome
An Adapted City	 
The City's Blue Network	  
A Healthy City	  
The City's Productive Landscapes	
The City's Greenways	  
The City's Ecosystem	<p>Green Living Spaces Plan</p>
The City's Green Living Spaces	<p>September 2013</p>

The Green Living Spaces Plan goes beyond planning.

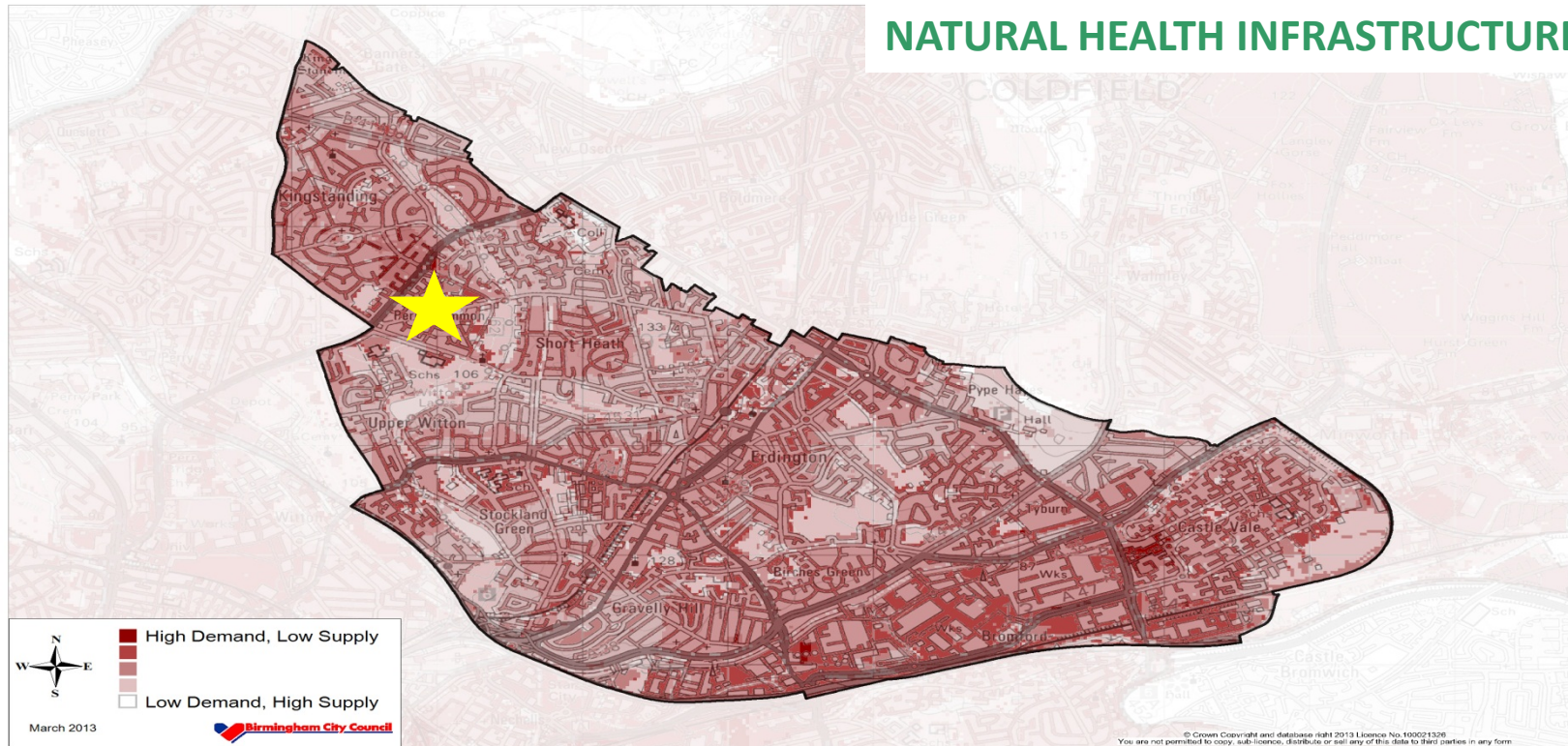
In its ambition for the city

Introduces Natural Capital, Ecosystems Approach and Biophilic City

The 7 principles now enshrined in the draft Birmingham Development Plan – 2031; & Draft Supplementary Planning Document – Sustainable Development Policy

'A CITY'S FUTURE IS A CITY'S PARKS'

NATURAL HEALTH INFRASTRUCTURE PLANS



Community gain
£1.5 million
pounds for local
access and
improvements

Merge GIS data sets

Public Health –
childhood obesity
& mental health

Climate-Just
data
layers

Compound
Ecosystem Services
maps

NATURAL
HEALTH
IMPROVEMENT
ZONE

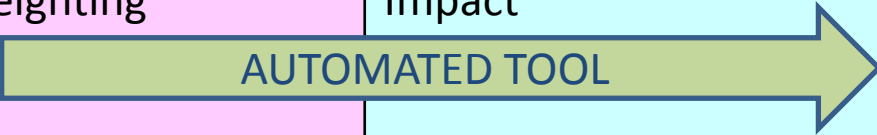


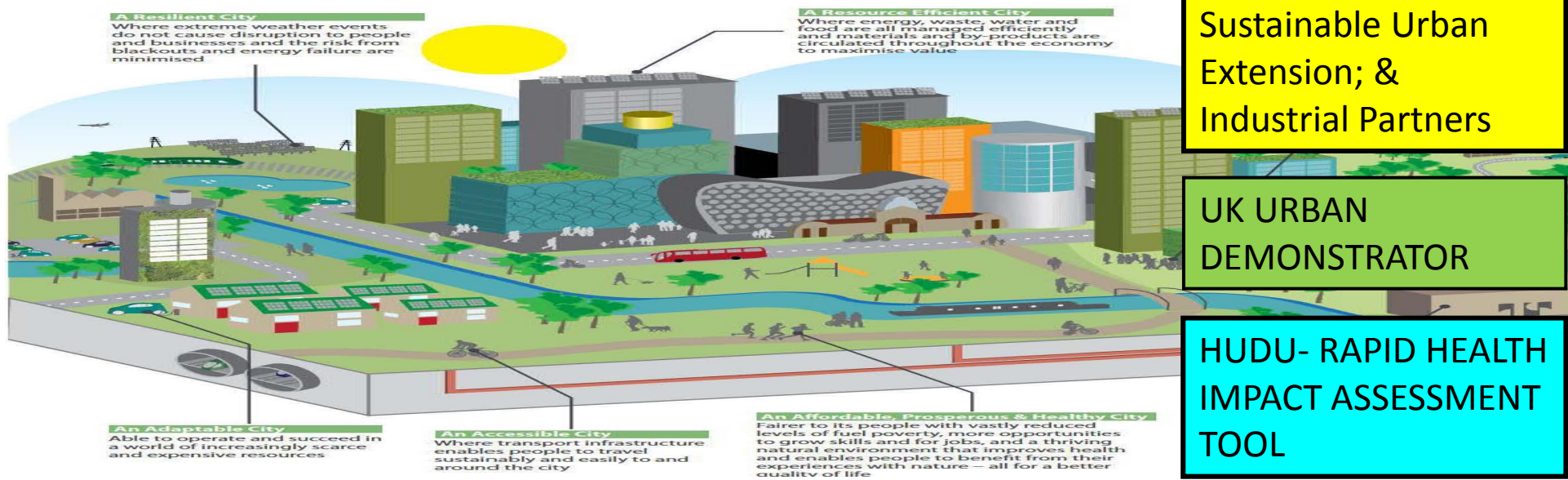
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Natural Capital Planning Tool - NCPT

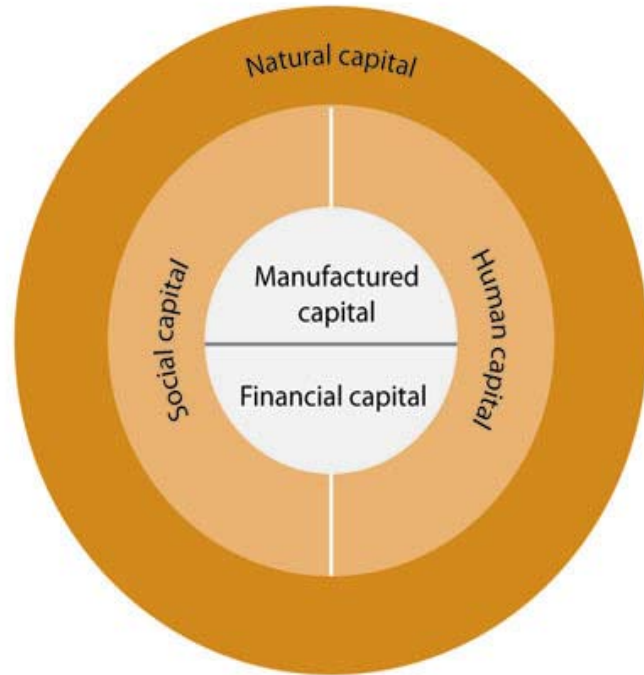
(R.I.C.S.)

10 Ecosystem Services	Multiple Benefits	Stakeholders & Co-investors	Returns on Investment
25 indicators Ecosystems Impact Score	Ecosystem Service Weighting	Ecosystem Service Impact	Development impact score & options





'A CITY'S FUTURE IS A CITY'S PARKS'



Source: Forum for the Future (2013)
Five essential capitals for human wellbeing

CORPORATE NATURAL CAPITAL ACCOUNTS

25 YEAR NATURAL CAPITAL PLAN

WAVES- recommends starting with a sub-account – natural environment

U
R
G
E
N
C
Y

Natural Capital balance sheet- example

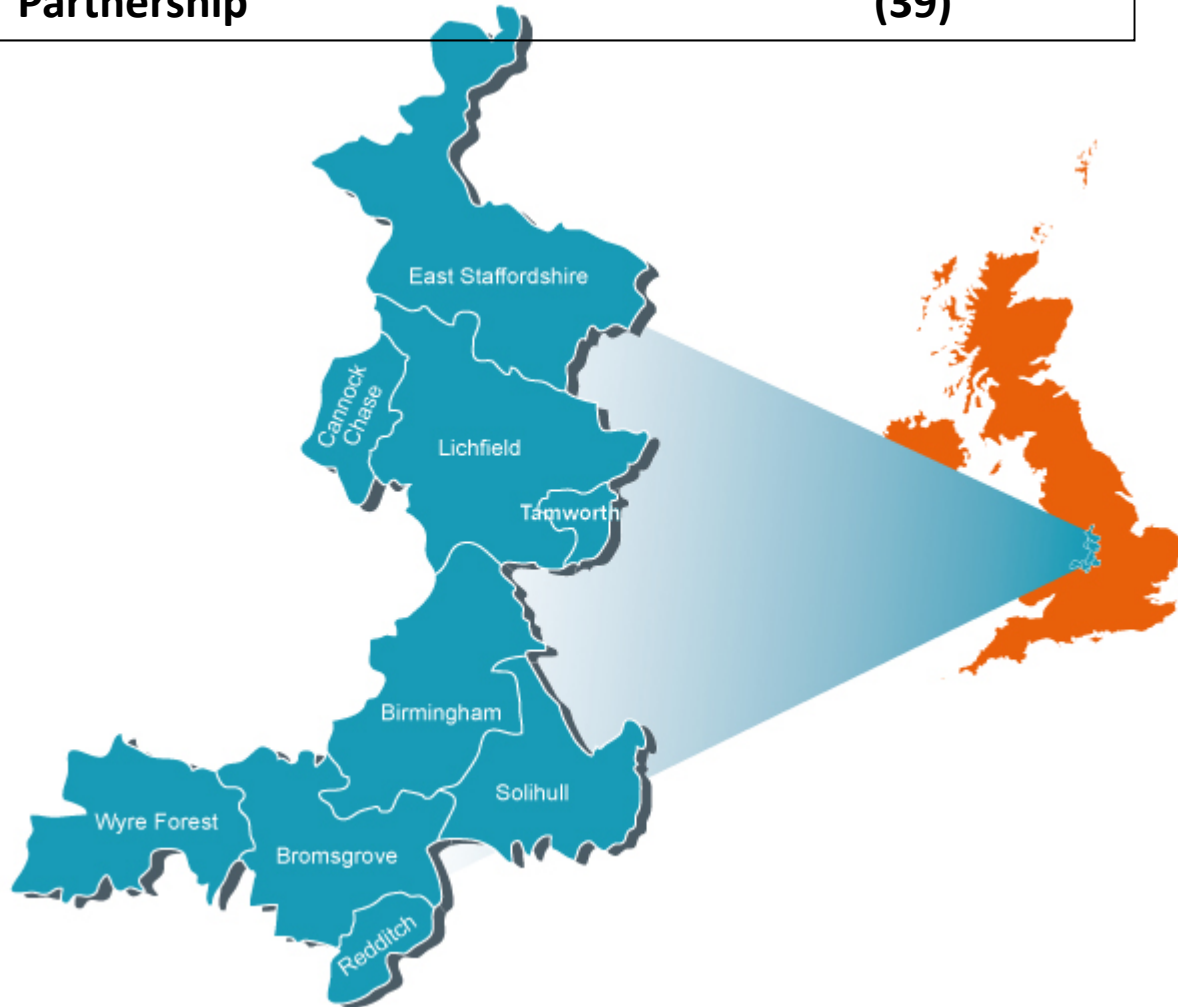
Assets		Year 2013		
		Renewables		Total
		Private	External	Value
		£'m	£'m	£'m
1	Baseline value (2010)	10.1	10.4	20.5
2	Gains/(losses)	1.5	2.5	4.0
3	Additions/(disposals or consumptions)	1.0	1.0	2.0
4	Revaluations and adjustments			
	Gross Asset Value	12.6	13.9	26.5
Liabilities		Private	External	
5	Legal provisions			
6	Other maintenance provisions	(1.0)	(1.5)	(2.5)
	Total maintenance provisions			(2.5)
	Total Net Natural Capital			24.0

Natural Capital Committee SONC 3 (27/01/2015)

(Case Study Birmingham- first World City)

'A CITY'S FUTURE IS A CITY'S PARKS'

Greater Birmingham & Solihull Local Enterprise Partnership (39)



Local Nature Partnerships (50)

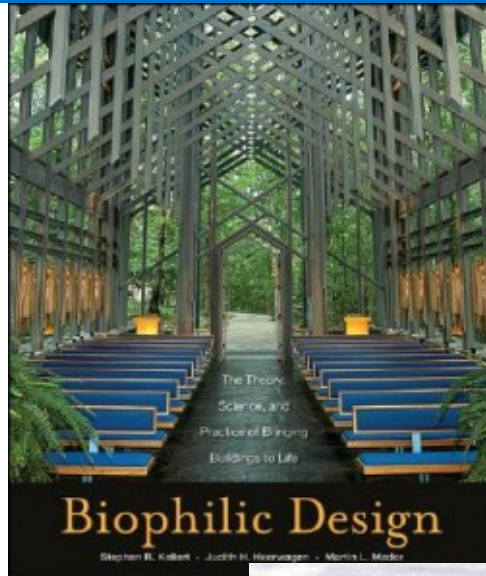
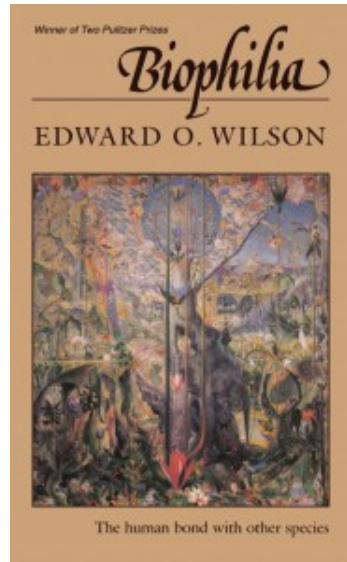
Birmingham & Black Country LNP working on an Environmental Dashboard – 10 Indicators- to be adopted across all 6 WM -LNP's; 'single' agenda with 6 WM LEP's

“Address interdependence of Economy with Natural Capital”

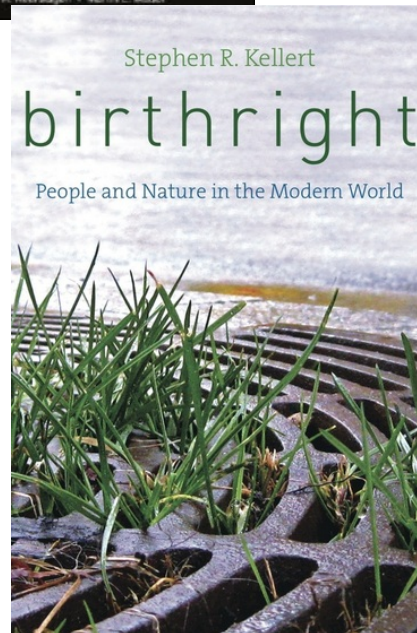
25 YEAR NATURAL CAPITAL PLAN

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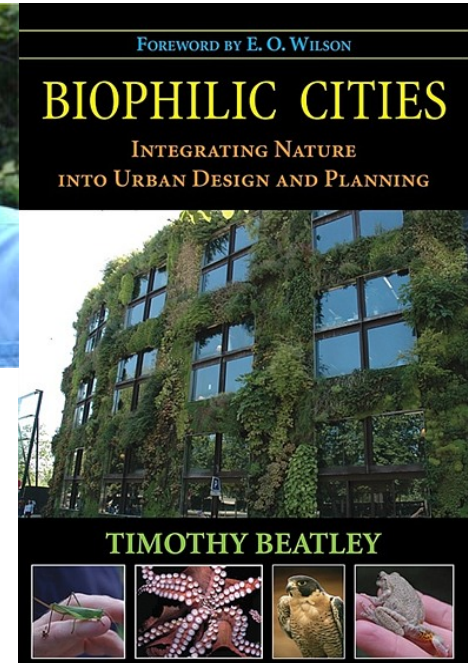
Biophilia - E.O. Wilson



: **biophilia hypothesis**, idea that humans possess an innate tendency to seek connections with [nature](#) and other forms of [life](#). biophilia is “the passionate love of [life](#) and of all that is alive.” The term was later used by American biologist [Edward O. Wilson](#) in his work *Biophilia* , which proposed that the tendency of humans to focus on and to affiliate with nature and other life-forms has, in part, a genetic basis.(Harvard University Press, 1984)



Tim Beatley, PhD.
Teresa Heinz Professor of Sustainable Communities,
University of Virginia;



[Stephen R. Kellert](#)
Tweedy Ordway
Professor of Social
Ecology at the
Yale University
School of Forestry
and Environmental
Studies

Birmingham: The UK's First Biophilic City

BiophilicCities - Cities that achieve a deep affinity with nature



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Questions & Answers?

<http://greencity.birmingham.gov.uk/>

<http://www.birmingham.gov.uk/greenlivingspaces>

<http://www.birmingham.gov.uk/plan2031>

http://birminghamclimate.com/ie_index2.html

<http://www.wbcds.org/home.aspx>

<http://uknea.unep-wcmc.org/>

http://www.local.gov.uk/health/-/journal_content/56/10180/3510483/ARTICLE

<http://www.bmj.com/content/348/bmj.g2407>

<http://www.cell.com/trends/endocrinology-metabolism//retrieve/pii/S1043276007000690?cc=y>

<http://www.intelligenthealth.co.uk/team/dr-william-bird/>

http://www.landscapeinstitute.co.uk/PDF/Contribute/PublicHealthandLandscape_CreatingHealthyPlaces_FINAL.pdf

<http://www.theguardian.com/cities/2014/apr/03/birmingham-san-francisco-oslo-global-green-biophilic-cities-club>

<http://biophiliccities.org/>

<https://www.naturalcapitalcommittee.org/>

[http://www.sustainablecitiesindex.com/;](http://www.sustainablecitiesindex.com/)

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