

@NCI\_NatCap  
#VoLSS



# Valuing our Life Support Systems 2014

Report Launch  
25<sup>th</sup> June 2015



# Valuing our Life Support Systems

## Main finding & key messages

Prof Rosie Hails & Prof Mike Acreman





# Main findings





















































## Valuation of natural capital

- enables use of rational policy and business tools for decision-making about investments in infrastructure
- will help us achieve long-term sustainability.

We need

- an ethical framework to ensure the appropriate use and fair distribution of the benefits of natural capital.
- robust and coherently applied concepts, terms and principles, based on sound science.
- to mainstream concepts; potential realised only when integrated across government, business & public.

# Natural Capital Score Card - progress

	progress 				
	conceptual framework in place	practical implications understood	evidence and tools available	good examples of implementation available	mainstream adoption of good practice
definition of natural capital					
natural capital and economics					
ethics of natural capital					
natural capital and health					
natural capital and nature conservation					
natural capital and cultural services					
natural capital and business					
natural capital and government policy					
natural capital and water management					
natural capital and urban environments					
natural capital and planning					

# Natural Capital Score Card – future priorities

	<div> <div>progress</div> <div></div> </div>				
	conceptual framework in place	practical implications understood	evidence and tools available	good examples of implementation available	mainstream adoption of good practice
definition of natural capital				★	★
natural capital and economics	★	★		★	★★★
ethics of natural capital		★★	★★	★	★★★
natural capital and health			★★		★
natural capital and nature conservation			★★★★	★★	
natural capital and cultural services		★★	★	★	
natural capital and business	★	★★	★★★	★	★★★★★★
natural capital and government policy	★★★★	★★	★		★★★★★
natural capital and water management		★	★	★	
natural capital and urban environments			★★★	★★★	★★
natural capital and planning		★		★★	★★★



# Key messages

## To business leaders

- Re-position natural capital from a perceived problem, liability and fear into a sound, ethical, business investment opportunity
- Form partnerships with research teams and local stakeholders to identify impacts and improve access to research, data & measurement
- Develop valuation methods for accounting, but base them on sound science incorporating complexity and interconnectivity of the natural world

# Key messages

## To researchers

- Define interactions between the five forms of capital – financial, manufactured, human, social and natural
- Express scientific results of research in language that is easily understood by businesses and land-managers/planners (e.g. green infrastructure)
- Develop consistent long-term monitoring programmes - UK has considerable data and knowledge, but no agreed set of metrics, frameworks nor baselines to judge the current state, trends and future direction



# Key messages

## To policy-makers and planners

- Safeguard natural capital and encourage behavioural change that will result in multiple benefits
  - threat from a new 'perfect storm' where lifestyles damage personal health and well-being and our environment at local to global scale
- Use natural capital valuation methods that are scientifically sound, ethically and socially acceptable

# Key messages

## To policy makers and planners (2)

- The functioning of businesses as sustainable and ethical managers of natural capital is reliant upon government and civil society creating an enabling environment

We need

- mutual understanding of how business investment in natural resources can best be enhanced and governed
- a clear and long term external policy framework

# Immediate follow-up steps

VoLSS was part of a journey, not the end

Series of activities building on priority issues identified

NCI is independent and will facilitate

- cross-sectoral fora
- dialogues
- policy development



# Putting the ecosystem approach into practice

## One day dialogue

Ecosystem approach:  
good concept for natural  
capital manage  
“How does it work into  
practice?”

Edinburgh  
28 September 2015



# Natural Capital without boundaries

## One day dialogue

Linking management of catchments, coastal zone & open sea

- Devon Maritime Forum
- Rivers Trust
- WWF Celtic Seas
- Environment Agency
- Defra



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# Natural Capital in city planning

One day dialogue

Integrating natural capital into city planning

- UK Constructors Group for Biodiversity
- Ecosystem Knowledge Network
- City Councils



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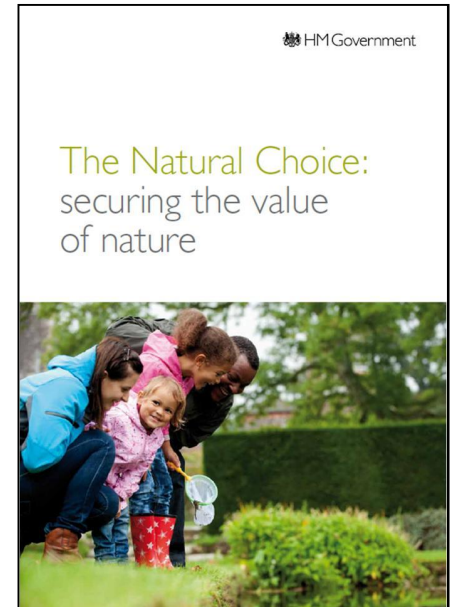
NATURAL ENVIRONMENT RESEARCH COUNCIL

# Natural capital, the 25 year plan and devolution

Natural capital recognized by devolved administrations, but in different forms – potential benefits from cross-working



NCC's 3<sup>rd</sup> Report - 25-year plan to meet 2011 White Paper. Implementation needs science under-pinning





# Learned society response



- Advising on Govt policy
- Advancing education, professional development and public interest
- Linking ecology & biomedical science through health agenda
- Supporting NCI's Project Officer.



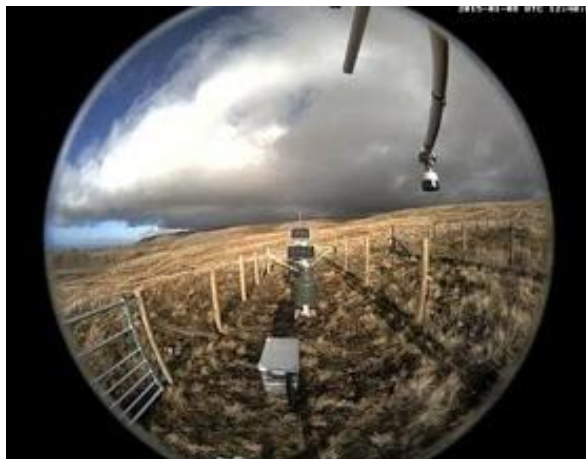
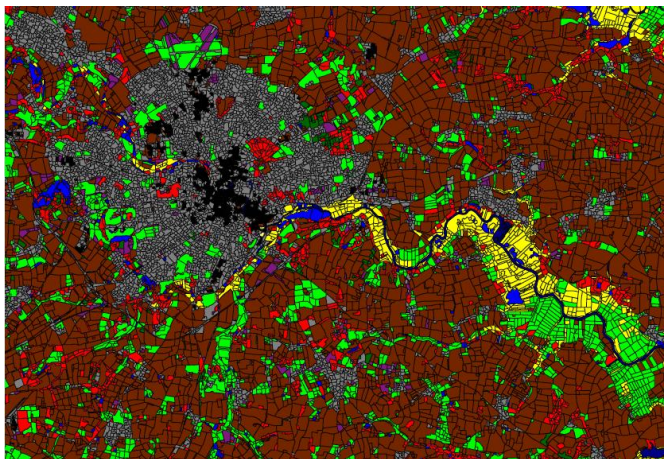
British Ecological Society

( WiFi network: FH Conferencing Password: @BritishQuakers )



- Promoting ecological knowledge and solutions
- Publishing international journals
- Running special interest groups
- Organising and sponsoring events
- Funding NCI Development Officer.

# Research institution response

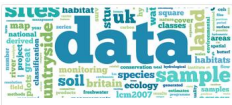


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### Environmental Information Platform


CEH's Environmental Information Platform provides access to datasets, web based tools and analytical facilities. It enables you to visualise and interrogate the diverse environmental datasets held by CEH.




**Browse our data**  
Find, view and access data resources in the CEH Information Gateway




**Drought portal**  
Explore over 50 years of drought statistics for the United Kingdom



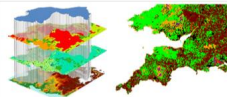
**Land cover mapping**  
Land Cover Map is a thematic classification of satellite image data covering the United Kingdom



**UK Rainfall**  
Map, plot and download daily and monthly rainfall data from the 1km gridded CEH-GEAR Great-Britain and Northern Ireland dataset



**CHES Explorer (coming soon)**  
The Climate, Hydrology and Ecology research Support System is a 1km UK meteorological driving dataset for the JULES land surface model



**Ecomaps**  
ECOMAPS is a model that enables prediction of environmental characteristics at a range of geographic scales

The new CEH  
Environmental  
Information  
Platform





# Research institution response



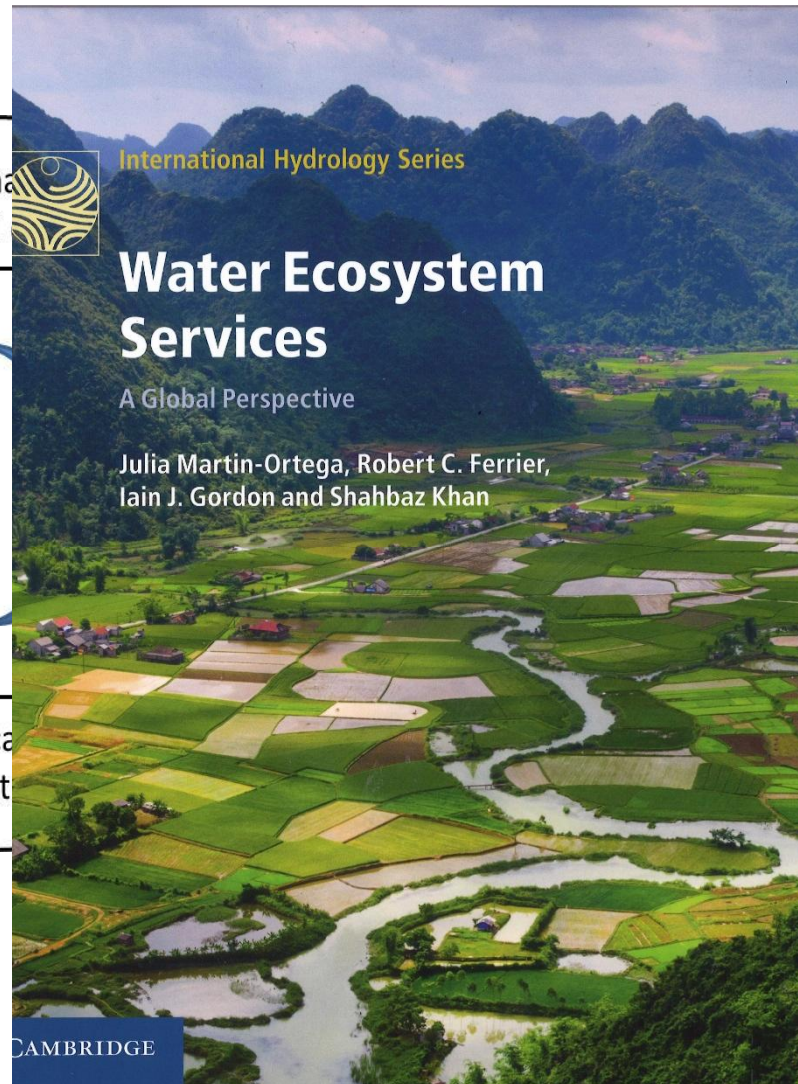
The James  
**Hutton**  
Institute

Sustainable management  
of natural capital



Natural capital ->  
ecosystem function ->  
ecosystem services

Natural capital  
restoration



...s, methods,  
...es & science

...g current policy/  
... new policy (e.g. CAP)

... science findings to  
...se studies (e.g.  
... restoration)

...g end-user databases  
...ement tools (e.g.  
...ng)

...g new management  
...pproaches (e.g. PES)

# Acknowledgement

The Natural Capital Initiative would like to thank the sponsors of Valuing Our Life Support Systems 2014 for their generous support.



and



for hosting this launch event

