CGDD OECD seminar: The assessment of ecosystem services and its use for public policies

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Outline for response

- Build on presentation and paper
- Focus on key points from the UK NEA and lessons learnt from policy perspective including the Natural Environment White Paper
- Observations on how can NEAs influence policy making

There is an increasing body of evidence on the economic value of ecosystems and the services they provide...

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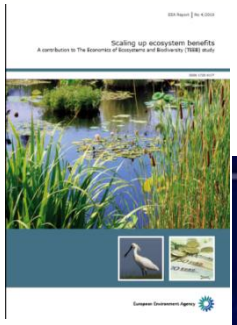

GLOBE INTERNATIONAL
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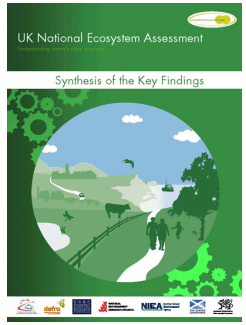
VALUING NATURE NETWORK



natural capital PROJECT

Natural Capital Initiative
Linking Environment & Policy

2005 2010 2011

Why did we do a National Ecosystem Assessment?

The UK NEA was the first analysis of the UK's natural environment in terms of the benefits that it provides to people.

The **objectives** of the UK NEA were to:

1. Produce an **independent and peer-reviewed** National Ecosystem Assessment for the whole of the UK.
2. **Raise awareness** of the importance of the natural environment to human well-being and economic prosperity.
3. Ensure full **stakeholder participation** and encourage different stakeholders and communities to interact and, in particular, to foster better **inter-disciplinary cooperation** between natural and social scientists, as well as economists.

Importance of high level messages from UK NEA synthesis report

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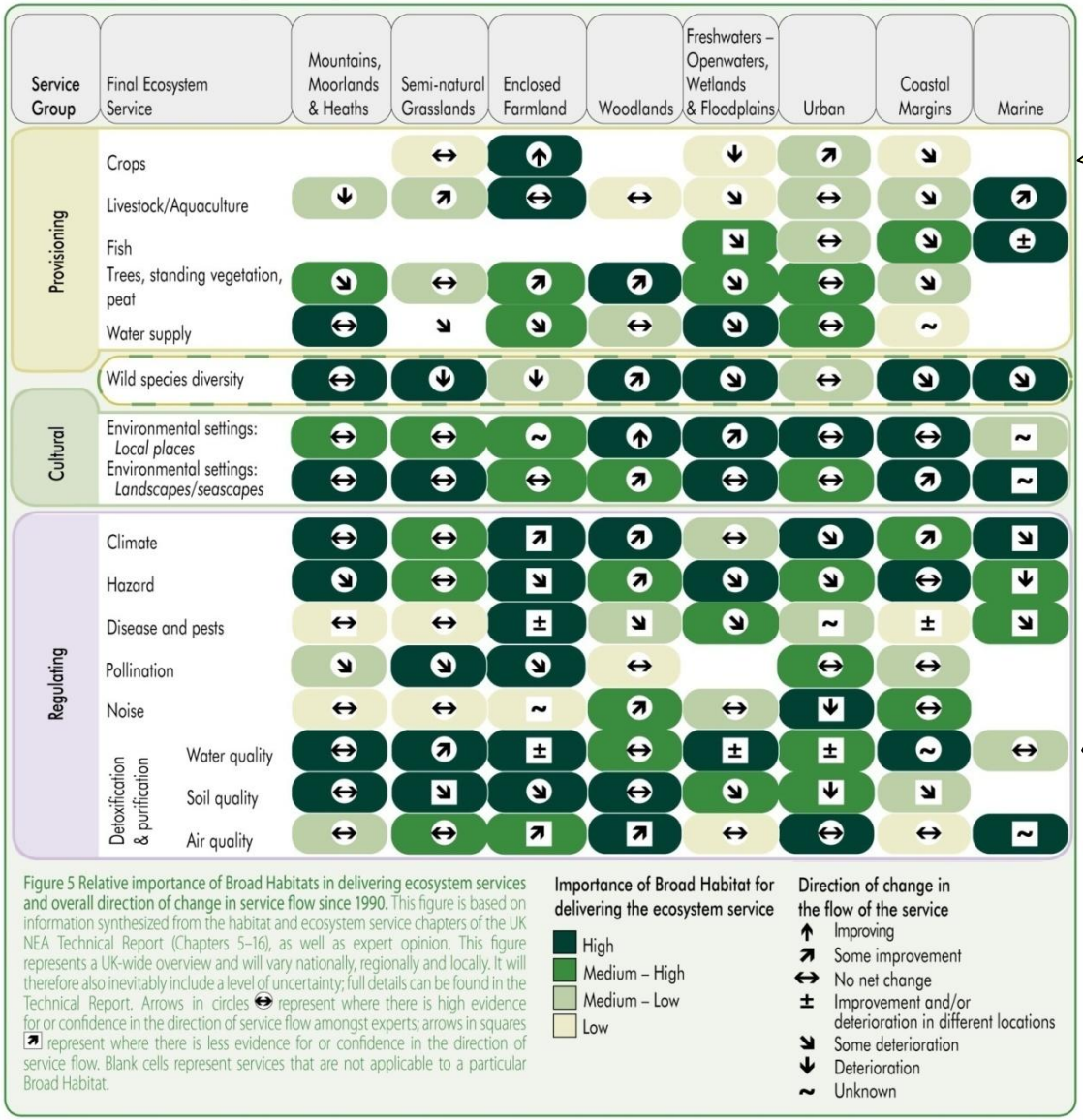

Figure 5 Relative importance of Broad Habitats in delivering ecosystem services and overall direction of change in service flow since 1990. This figure is based on information synthesized from the habitat and ecosystem service chapters of the UK NEA Technical Report (Chapters 5–16), as well as expert opinion. This figure represents a UK-wide overview and will vary nationally, regionally and locally. It will therefore also inevitably include a level of uncertainty; full details can be found in the Technical Report. Arrows in circles represent where there is high evidence for or confidence in the direction of service flow amongst experts; arrows in squares represent where there is less evidence for or confidence in the direction of service flow. Blank cells represent services that are not applicable to a particular Broad Habitat.

Marked changes over the past 60 years

30% of ecosystem services currently declining, many others in a reduced or degraded state

Past drivers: habitat change, pollution, exploitation.

Future drivers: climate change and invasive species

Importance of high level messages from UK NEA synthesis report

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Table 1 Summary impacts for the changes from the 2000 baseline to 2060 under each of the UK NEA Scenarios (low climate change scenario) in Great Britain (£million per year). Positive numbers indicate improvements from the baseline (negative numbers indicate worsening situations). The last but one row ranks the Scenarios when only their market values are considered (1= highest value; 6 = lowest values with green values being positive and purple indicating negatives). The final row repeats this ranking when all values (market and non-market) are considered. Scenarios are as follows: GF = *Go with the Flow*; GPL = *Green and Pleasant Land*; LS = *Local Stewardship*; NS = *National Security*; NW = *Nature@Work*; WM = *World Markets*

	GF	GPL	LS	NS	NW	WM
Market agricultural output values *	220	-290	350	680	-510	420
Non-market GHG emissions †	-800	2,410	-100	3,590	4,590	-2,130
Non-market recreation ‡	5,710	6,100	1,540	4,490	24,170	5,040
Non-market urban greenspace ¶	-1,960	2,350	2,160	-9,940	4,730	-24,000
Total monetised values §	**3,170**	**10,570**	**3,950**	**-1,180**	**32,980**	**-20,670**
Rank: Market values only	4	5	3	1	6	2
Rank: All monetary values	4	2	3	5	1	6

* Change in total Great Britain farm gross margin.

† Change from baseline year (2000) in annual costs of greenhouse gas (GHG) emissions from Great Britain terrestrial ecosystems in 2060 under the UK NEA Scenarios (millions £/year); negative values represent increases in annual costs of GHG emissions

‡ Annual value change for all of Great Britain.

¶ Undiscounted annuity value; negative values indicate losses of urban greenspace amenity value.

§ We acknowledge some double counting between urban recreation and urban greenspace amenity value. Further data is needed to correct for this.

Key messages of the UK NEA integrated into Natural Environment White Paper

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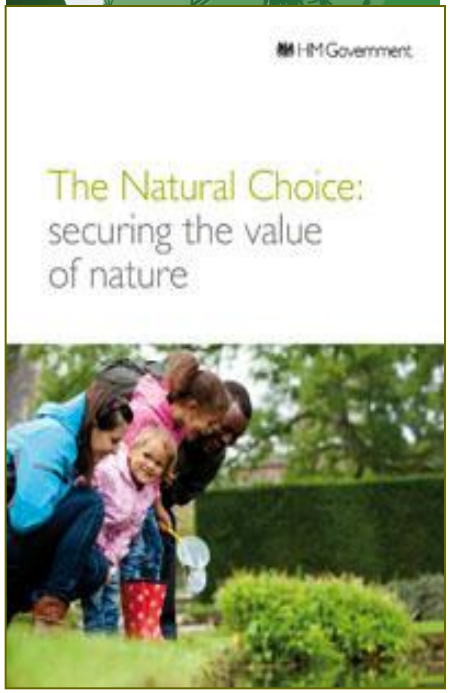
The natural world is critical to our well-being and economic prosperity, but is consistently undervalued in decision making.
Significant changes over past 60 years in ecosystems and the ways people benefit from them.
UK's ecosystems currently delivering some services well, but others in long-term decline.
Changing and growing demands of UK population + climate change, likely to increase pressures on ecosystem services.
Decisions now will have consequences far into the future for ecosystems and human well-being.
Need appropriate mix of regulations, technology, financial investment and education; behaviour change and more integrated approach.



White Paper: from theory to practice

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- **Reflecting the value of nature in decision making**
  - Accounting for environmental impacts in policy appraisal
  - Natural Capital and Ecosystem Accounting
  - Natural Capital Committee
- **Protecting and enhancing the natural environment**
  - Landscape scale partnership initiatives
  - Biodiversity offsets
- **Capturing the value of nature through markets**
  - Payments for Ecosystem Services
  - Ecosystem Markets Task Force

How can NEAs influence policy making?

- Developing innovation in policy making
- Softer benefits in policy making
- Building block underpinning new policy initiatives
- Timescales for embedding in policy – robust evidence base from UK NEA but moving from theory to practice takes time