



Department
for Environment
Food & Rural Affairs

Enabling a Natural Capital Approach: A new Defra on-line resource

Valuing Nature Conference, Royal Society
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Forestry Commission
England



Environment
Agency

What are we planning to provide?

Synthesis of guidance, evidence, data sources, tools and real-world examples to enable decision-makers and appraisers to better value and account for natural capital in England.

Will support and develop HMT Green Book principles, by:

1. **building capacity** for assessment and valuation of the natural environment, by reducing search costs for analysts and decision-makers;
2. **providing a platform** for ongoing updating of tools and guidance as knowledge develops, better identifying evidence needs and areas for development

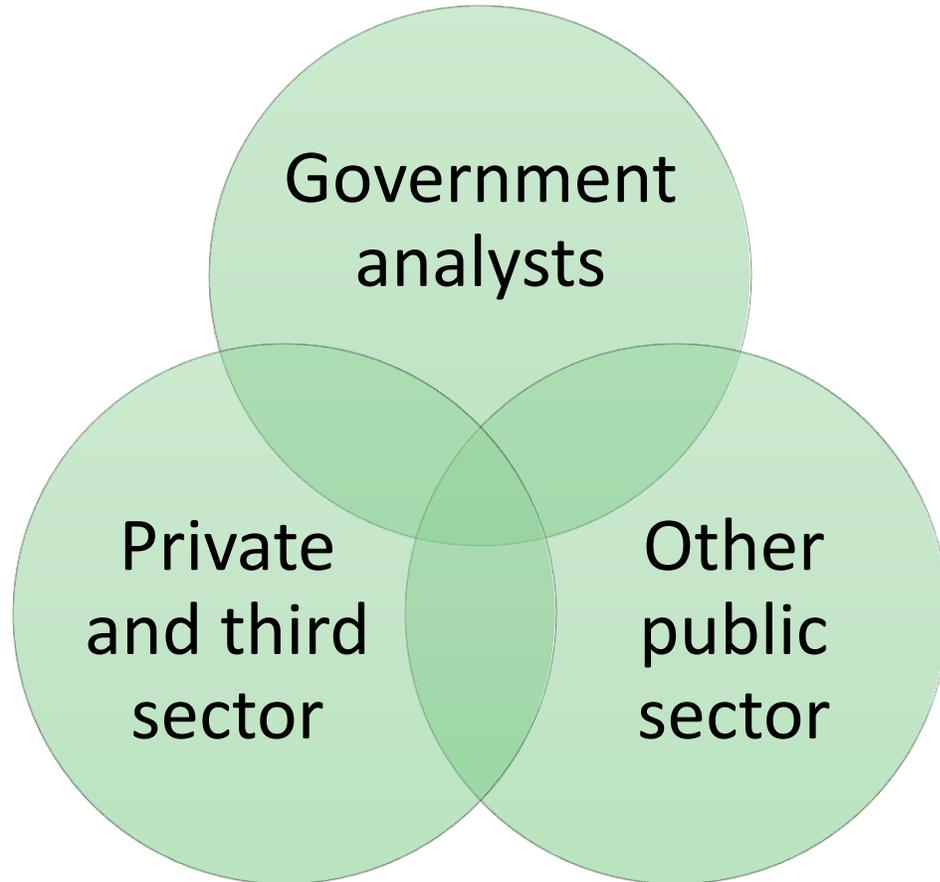
Trailed in Green Finance Strategy



Guiding principles

- ✓ **Shop window** – not swanky new tool
- ✓ **Goldilocks** - not kitchen sink
- ✓ **Signposting** – we're not monopolists
- ✓ **Join up** various key sources
- ✓ **Demystify** – synthesis and integration
- ✓ **User-focused** - aimed at non-specialists
- ✓ **Consultative** – worked closely across Defra Group

Developed to be of interest to a range of users



- Government economists and analysts. This is the primary audience, particularly for the first version.
- Public sector organisations interested in understanding the scientific and economic evidence around the natural environment
- Other practitioners, such as in private and third sector organisations, wishing to access guidance, evidence and tools that are used and promoted in Government.

A renewed policy agenda

“Better incorporate the full spectrum of natural capital and the value of the benefits it provides into analysis and appraisal across government.”

“Improve our understanding and valuation of the benefits of natural capital”



“As part of implementing Green Book, policy decision makers need access to robust values for changes in the services provided by natural capital ...”

Natural Capital Committee

State of Natural Capital Annual Report 2019
Sixth Report to the Economic Affairs Committee of the Cabinet

New Green Book provides a great starting point ...

... for more consistent application of natural capital principles and economic valuation

- ✓ Screening and 4-step natural capital approach
- ✓ Introduces new sources of valuation evidence
- ✓ Specific guidance on range of environmental effects
- ✓ Identifies cross-cutting methodological issues

A2. Non-market Valuation and Unmonetisable Values

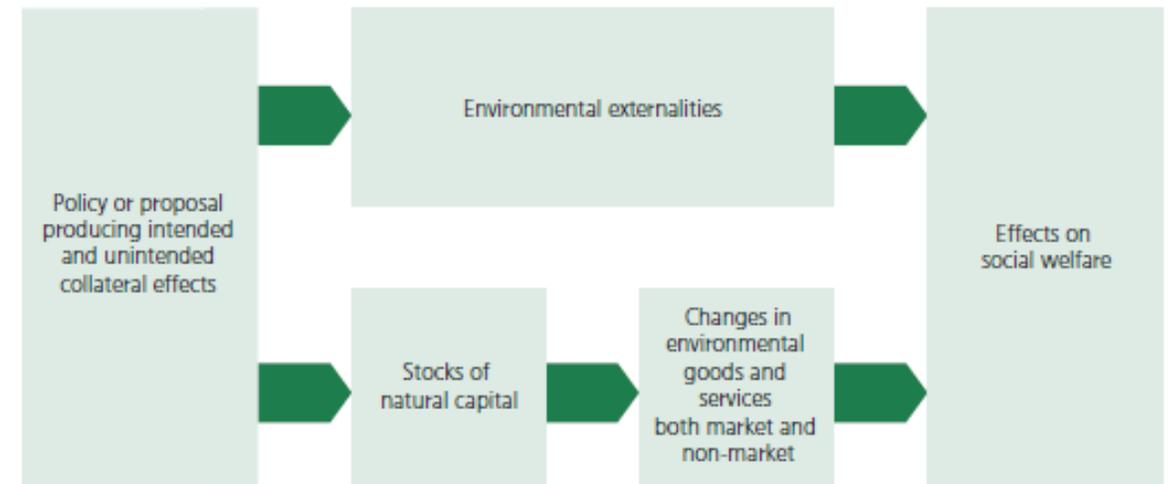
A2.1 This Annex provides detail on specific approaches to non-market valuation techniques and generic values for use in appraisal. It covers:

- a range of environmental techniques
- land values
- energy efficiency and Greenhouse Gases
- life and health
- travel time

Environmental and natural capital

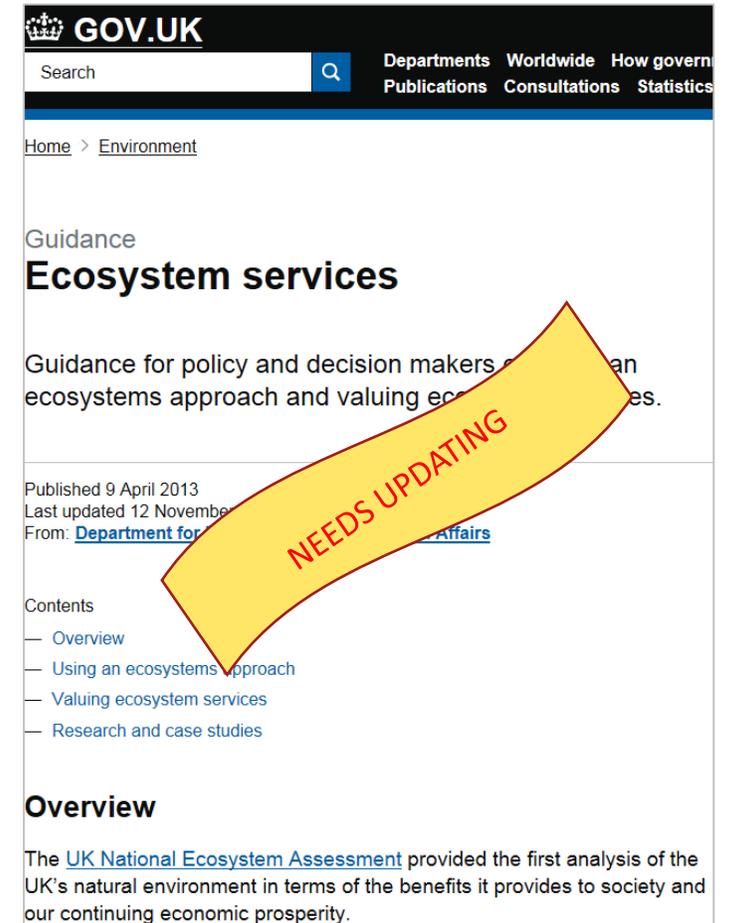
A2.2 Where potential effects on natural capital are identified by the screening questions in [Chapter 6](#), the 4-step approach in [Box 19](#) can be used to identify whether and how an intervention may affect stocks of natural capital and the benefits they provide. Further guidance can be provided by Department for Environment Food and Rural Affairs (DEFRA) at EnvironmentAnalysis@defra.gsi.gov.uk.

Figure 3. The Natural Capital Framework



... but challenges remain in practice

- Existing supplementary and Defra guidance needs updating
- Evidence base is vast, diverse, dynamic and inconsistent. Where to start?
- Diversity of decision contexts
- New valuation evidence is expensive
- Limits to being prescriptive
- Growing number of “tools” causes confusion
- Appraisal vs Accounting
- Regulating services depend upon modelling
- Spatial variation
- Perfection vs pragmatism



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Guidance

Ecosystem services

Guidance for policy and decision makers on an ecosystems approach and valuing ecosystem services.

Published 9 April 2013
Last updated 12 November 2013
From: [Department for Environment, Food and Rural Affairs](#)

Contents

- [Overview](#)
- [Using an ecosystems approach](#)
- [Valuing ecosystem services](#)
- [Research and case studies](#)

Overview

The [UK National Ecosystem Assessment](#) provided the first analysis of the UK's natural environment in terms of the benefits it provides to society and our continuing economic prosperity.

NEEDS UPDATING

#1 New Synthesis of Guidance

For those who are looking to learn more about natural capital and environmental valuation and need practical guidance.

1. **Overview** of natural capital framework, environmental effects.
2. **Economic valuation** of the environment, why it is useful, how it can be valued, practical considerations, challenges and limits.
3. **Project appraisal** - Practical guidance on the ways in which natural capital considerations can inform the various stages of project or policy appraisal
4. **Natural capital accounting** - scope, purposes, principles and methods of natural capital accounting. Practical considerations and challenges are also highlighted.
5. **Place-based natural capital approaches**, and the practical tools and guidance that have evolved to support these.

#2 Environmental Effects Databook

- ❖ Aims to collate and make accessible the most relevant and cited sources, studies and key estimates for 24 categories of ecosystem services and environmental effects
 - Provisioning services
 - Abiotic flows
 - Regulating services
 - Cultural services
 - Bundled services
 - Negative environmental effects
- ❖ Overview of each service / effect
- ❖ Guidance and caveats
- ❖ ~ 200 references ~ 170 selected monetary estimates

Draws from

- ✓ Defra Group expertise
- ✓ Green Book,
- ✓ EVRI
- ✓ MEBIE
- ✓ UK Natural Capital Accounts
- ✓ EVL Tool
- ✓ UK NEA

#3 Natural Capital Assets Databook

- ❖ Collates and summarises selected valuation studies, but does not directly report specific estimates
- ❖ UK Natural Capital Accounts for each broad habitat
- ❖ 25 Year Environment Plan Indicators, based on the natural capital framework
- ❖ Links to NE Natural Capital Indicators for defining and measuring change in natural capital
- ❖ Selected biophysical data, evidence and tools
- ❖ Selected valuation tools and evidence
- ❖ Market-related tools
- ❖ ~ 100 references



#4 Collates around 70 real world examples

| | NATIONAL | REGIONAL / LANDSCAPE | LOCAL |
|------------------------------|----------|----------------------|-------|
| NATURAL CAPITAL ACCOUNTING | ✓ | ✓ | ✓ |
| NATURAL CAPITAL APPROACH | ✓ | ✓ | ✓ |
| VALUATION IN DECISION-MAKING | ✓ | ✓ | ✓ |
| INNOVATIVE FUNDING | ✓ | ✓ | ✓ |

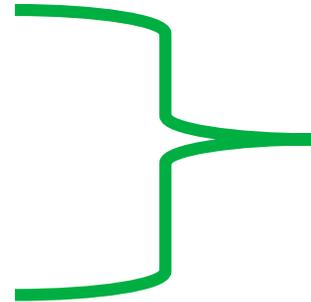
- ✓ Signposts other sites that collate case studies and applications

#5 Selected tools are featured

- ❖ 1-2 page summaries on a range of natural capital / valuation tools developed by Government
- ❖ Focus on cross-cutting analytical tools and resources such as NEVO, ORVal
- ❖ 10 tools featured, with potential to include more
- ❖ Signposts other sites that have made a more general assessment of natural capital tools.
- ❖ Potential to expand in future

A few disclaimers

- It's not out yet!
- Brand name?
- An imperfect and ongoing attempt to bring a bit of clarity to a messy evidence base.
- Not exhaustive – exclusion does not imply that other sources / tools cannot be used
- Inclusion does not imply unconditional endorsement of any use
- Doesn't replace other requirements
- Feedback will be important - future versions can update and refine



For individual users to assess the robustness and appropriateness of valuation evidence and apply it in an appropriate and proportionate manner.