Economics for the Environment Consultancy

UKNEA follow-on, WP1, Cambridge 4-5 February 2013

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WP1: Natural Capital Asset Check











WP1 Aims

The state of our natural capital assets are not routinely assessed for their ability to support critical future ecosystem services. However, contemporary techniques make such analysis possible, and can be applied in a number of examples which provide information that is improves decision-making.

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WP1 Aims

- Review and develop the conceptual framework developed in the Defra scoping study
- Review and develop further information on (i) data inputs and (ii) relationships between natural capital assets.
- Conduct further case studies and testing of this approach
- Links to modified national income accounts (incorporating ecosystem services value).

UKNEA follow-on WP1 Overview



Objective 0: Management & Coordination of team

Timeline & Progress

Phase	What	When Planned		Status
Defra Study	Discussion with Natural Capital Committee	2012	18 th July	DONE
	NKAC Scoping Study Outputs		Sept	COMPLETED Nov
		-		
Obj 1	Team teleconference, start to review method		2 nd Oct	DONE
	Case study proposition and selection		Nov	COMPLETED Dec
	Method revision		Dec	COMPLETED Jan '13
	Meeting 1 and report	2013	15 th Jan	COMPLETED 22 nd Jan
Obj 2	Case studies		Feb – Apr	STARTING
Obj 3	Meeting 2		23 rd Apr	Tbc
	Method revision		May	Tbc
	Reporting		Jun	Tbc
	External review		July – Aug	Tbc
	Final report		Sept – Oct	Tbc

Asset Check Concept

- We use different indicators to assess for an asset:
 - a) How much do we have? (amount, condition)
 - b) What does it produce? and
 - c) How are our actions affecting a) & b) over time?

More specifically...

- We use different indicators to assess for an asset:
 - a) How much do we have? (amount, condition)
 - b) What does it produce? and
 - c) What is the relationship between a) and b)? (non-linear/linear, renewable/non-renewable)
 - d) What are the risks and vulnerabilities in this relationship? (thresholds, substitutes)
 - e) How are our actions affecting d) over time?

NCAC overview

The Asset	Defining natural capital and boundaries of the 'check'				
Extent and condition, linked to levels ecosystem services					
As set performance		What role the asset performs in supporting human welfare ~ The 'check' is of the performance of this role			
As set criticalities		Limits, Thresholds, Reversibility, Substitutability, Cumulative Impacts, Risks			
Asset Check		Can the asset give the target performance?			
Warning that future performance is at risk?					
Conclusions		Table to summarise key evidence			

Planned Case Study

- A. Freshwater
- B. Blue carbon (scoping)
- C. Pollinators
- D. Soil quality
- E. Urban green space (cultural services)
- F. Uplands
- G. Saltmarsh fisheries (extension)
- H. Estuaries x2
- I. Review links to accounts

Outputs

- Catalogue of case studies
- Publicly available 'approach' guiding NCAC:

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Question	Guidance on Answer			
A. Tradeoffs?	If one or more of the asset's key ecosystem services (see question D) are increased, does this lead to reductions in other services?			
B. Synergies?	If one or more of the asset's key ecosystem services (see question D) are increased, does this lead to increase in other services?			
Uncertainties	Give level of uncertainty* in analysis and reasons for this. * Use Uncertainty scale described in introduction.			
C. Sustainability test: is the asset currently able to give the target performance?	Compare integrity in question I and performance in question L.			
If yes - will this performance be sustained into the future?	Relate changes from question O and criticalities from P and Q to future changes identified in questions M an N. Give timescale - from question C.			
If no - state why?	Is this because target performance is unrealistic, or because integrity of asset is compromised, or both?			
D. Red flags?	This is a warning if future target performance is at risk, for example because: - the asset is underperforming (see question X) and continuing to decline (see Question O), or - there is prospect of collapse (a limit or threshold - see questions P and Q) which could be irrecoverable (i.e being irreversible, see question R, and with no substitute, see question U)			
Uncertainties	Give level of uncertainty* in analysis and reasons for this. Use Uncertainty scale described in introduction.			

Outcomes from Scoping & UKNEA follow-on study

- UK peer review of concepts
- Wider promotion of NCAC approach
- Stimulate others to bring forward asset checks
- Input to NCC thinking on 'unsustainable use'

Thank you!

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