

MAKING THE INVISIBLE VISIBLE: INTEGRATING CULTURAL ECOSYSTEM SERVICES INTO GRID PLANNING

Dr Izabela Delabre
Birkbeck, University of London
i.delabre@bbk.ac.uk



Birkbeck
UNIVERSITY OF LONDON

**FACULTY OF HUMANITIES
AND SOCIAL SCIENCES**

Previous research examines application of Cultural Ecosystem Services to support inclusive and effective Nature-based Solutions

How can ecological and inclusive electricity grid planning support sustainable multifunctional landscapes?

Acknowledgements: The work leading to these publications was financed through Nature Returns, which was co-sponsored by DEFRA and DESNZ. This project was led by Natural England in partnership with Environment Agency, Forestry Commission, RBG Kew at Wakehurst and local partners.



Contents lists available at [ScienceDirect](#)

Ecological Economics

journal homepage: www.elsevier.com/locate/ecolecon



Cultural ecosystem services and opportunities for inclusive and effective nature-based solutions

Simona Panaro^a, Izabela Delabre^{b,*}, Fiona Marshall^a

^a *SPRU - Science Policy Research Unit, University of Sussex Business School, University of Sussex, Falmer, Brighton, UK*
^b *School of Social Science, Birkbeck, University of London, London, UK*





Contents lists available at [ScienceDirect](#)

Environmental Impact Assessment Review

journal homepage: www.elsevier.com/locate/eiar



National targets, local landscapes: Challenges and possibilities for sustainable multifunctional land use planning in England

CONTENTS

1. Framings of Cultural Ecosystem Services (CES)
2. Benefits of broader CES perspectives for Nature-based Solutions and grid planning
3. Multifunctional land use mapping and modelling
4. Engaging with complexity



Framings of Cultural Ecosystem Services

Instrumental perspective

Cultural Ecosystem Services are the nonmaterial benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experiences (Millennium Ecosystem Assessment, 2005).

Stock-and-flow framing of people-nature relationships

Dichotomy between instrumental values and intrinsic values; Biophysical or monetary metrics

Relational / broader perspective

Cultural Ecosystem Services are “relational processes and entities that people actively create and express through interactions with ecosystems” (Fish et al., 2016b, p. 211).

Reciprocity: what people derive from, and co-produce with nature

Relational values (including care, responsibility, reciprocity); Social-cultural values; shared, plural, and cultural values; intrinsic values

Framings of Cultural Ecosystem Services in applied research into sustainable land use planning

Criteria for analysis	Instrumental approach	Relational approach
(1) CES and values recognized	Aesthetic values Recreational values	Aesthetic values Spiritual and religious values Sense of place Cultural heritage values Shared/collective values
(2) Methods used to evaluate/assess CES	Monetary analysis, e.g. willingness to pay Spatial models Participatory multi-criteria decision analysis Participatory GIS Models of future change	Open-ended questions and ethnographic approach Community Voice Method in combination with a Multi-Criteria approach in a deliberative-democratic process Deliberative Monetary Valuation in combination with Participatory Systems Modelling and Participatory Mapping Public Participatory GIS

Most important difference: the way in which research questions are formulated and pursued



**Benefits of broader CES perspectives for
implementing effective and equitable Nature-
based Solutions & grid planning**

Benefit 1: A broader CES approach could make visible a wide range of local values which are not seen in mainstream international CES frameworks

- Making local values visible supports context-specific NbS implementation and grid planning.
- Interpretive methods for understanding dimensions (e.g. emotions, connectedness, authenticity and spirituality) often overlooked.
- Diverse range of values ignored in NbS policy-making: risks undermining policies' effectiveness.

Benefit 2: A broader CES approach can help recognise the interconnectedness of the nature-human system and facilitate the co-production of mutual benefits

There is a need to:

- move towards a more integrated approach that considers the *reciprocal influence* between ecosystems and humans.
- establish monitoring and reporting frameworks that encompass natural and human systems and human-nature interactions.

Benefit 3: A broader CES approach can help to create a co-learning space to support the integration of different types of knowledge and worldviews

- Policies and practices could adopt a **knowledge co-production approach**, understanding local peoples' lived experiences, religious/ritual systems and subsistence needs.
- Creating a space for learning about **cultural processes, conflicts and impacts** at different scales can support more equitable, inclusive, effective and innovative policies and solutions.

Benefit 4: A broader CES approach can support the development of more just and equitable strategies for conservation

- Transcendent and shared values can emerge
- Build trust between participants
- Understanding conflicting interests
- Defining actions to meet both ecological and community needs.
- Local cultural values can support more equitable planning processes and facilitate effective conservation outcomes; lessons to be brought into planning for NbS and grid planning.

Benefit 5: A broader CES approach can support the active role of local communities in nature recovery and environmental governance

- A broader CES approach could facilitate a paradigm shift in landscape governance and management towards an integrated approach that promotes the care of the landscape as a whole and encourages the active role of the community in restoring nature.
- Despite need for integrated approaches, dominant perspective of policy and planning considers land use issues in isolation.

Tools to support: Multi-functional land use mapping and modelling

- Flexible participatory landscape modelling platforms (e.g. [LIMMMA by the University of Sussex](#)) support sustainable multifunctional landscapes.
- Engagement with evidence, uncertainties and opportunities.
- Need to enable engagement with platforms in participatory way.
- Integrating new data: knowledge dissemination, reflective and adaptive decision-making.
- Identification of priority evidence gaps to be filled.

Engaging with complexity

- Policy has not kept up with more progressive CES framings: are intangible aspects of CES seen as too complex to apply in practice?
- BUT deeper engagement with broader CES perspectives can support **more effective and inclusive interventions.**
- Collaborative research with local communities enables more inclusive monitoring and reporting.
- Application of broad CES approach into grid planning could **help to bridge the disconnection between the technical perspectives and critical social science approaches.**

Thank you

