

# Eco-what?! The need for clarity and consistency in communication using ecosystem terminology

## Introduction

Within the natural resource management sector multiple 'ecosystem' terms are presently in use. This briefing highlights key meanings underlying these terms, and suggests that better recognition of these concepts, together with consistency in use of terminology, will benefit both communication and practice.

## Key Points

**What is the problem?** Across all natural resource management sectors, it is common to encounter multiple terms which mention 'ecosystems' or 'ecosystem services'. Examples of these terms include; "ecosystem services approaches", "ecosystem service frameworks", "the ecosystem approach" or "an ecosystems approach". Sometimes a single document contains multiple terms used with a single meaning. In other cases, different documents use the same term, but with different meanings. This occurs in both formal documents and informal conversations, and across academic, practitioner and policy sectors.



**What is the result?** This plethora of terms and their uses can act as a barrier to good communication. Firstly, it can make it harder to reach new audiences: when multiple terms are used inconsistently, individuals who wish to engage in conversation or processes that use these terms feel confused or at a disadvantage. Secondly, it can make it harder for individuals and partners to communicate and make progress in their plans: if different people are using the same terms in different ways – or vice versa – this can eventually lead to frustrations and disappointment. At best, it slows down discussions; at worst, the differences can go unacknowledged or unnoticed, causing people to work at cross-purposes. Thirdly, some people wish to use the terms as a contemporary label for pre-existing ways of working. This further adds to the range of situations in which the label might be used, and how it might be understood.

**What are the main underlying ideas?** There are two distinctive concepts which underlie most discussions, and have encouraged the popularity of ecosystem terminology.

The first idea is called '**the Ecosystem Approach**' (sometimes also called 'an ecosystems approach'). This is a holistic approach to managing ecosystems that advocates taking a systemic and participatory approach. This concept was adopted by the Convention on Biological Diversity in 2000, reflecting the latest thinking about ecosystem-based management – such as the need for adaptive management – was well as the arguments for stakeholder empowerment and recognising that humans are a part of an ecosystem. The ambitious concept was captured in 12 complementary and interlinked 'Malawi principles', whose implementation was supposed to achieve the Convention's aim of conservation, sustainable use, and fair and equitable benefit-sharing. More information about the concept is available from <http://www.cbd.int/ecosystem>.

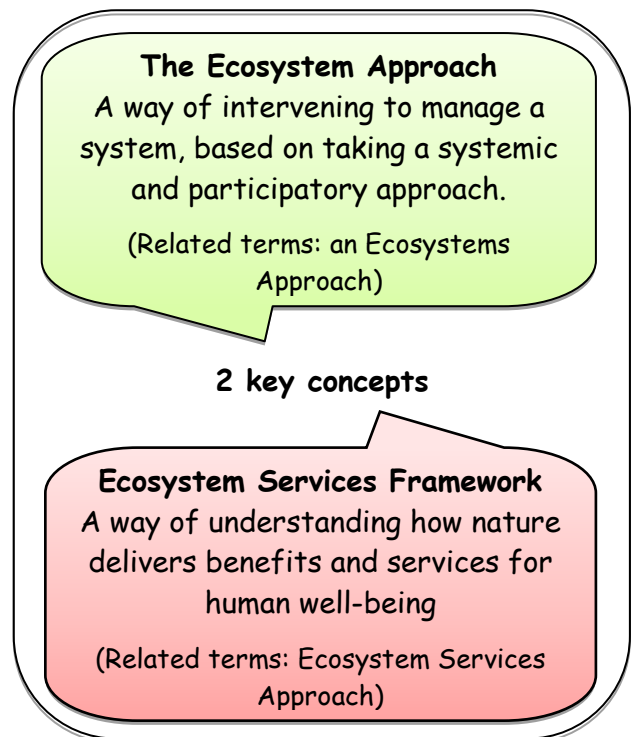
The second idea is called the '**Ecosystem Services Framework**' (sometimes also called 'the ecosystem services approach'). This is the idea of understanding how nature delivers benefits and services (ecosystem services) for human well-being, rather than more 'traditional' ways of describing natural systems in terms of biodiversity and ecological functions. The reports of the Millennium Ecosystem Assessment in 2005 greatly popularised this way of understanding the connections between natural systems and human well-being, and since then there has been much work to refine these concepts and explore exactly how these concepts can be used in practice. This entails many areas of work: e.g. from spatial mapping of ecosystem services, through to exploring the relationships between ecosystem services and biodiversity. Increasingly, in recent years this work has been often associated with methods to elicit and report economic values of the benefits that society realises from the natural environment. This way of understanding can and does influence management actions – for example, ecosystem services knowledge can be used to shape development plans – but does not encapsulate all 12 principles of the Ecosystem Approach.

In summary, one concept is a way of doing, and the other concept is a way of understanding and measuring. It is therefore important that they are not confused. However, these two concepts can be mutually supportive: studying ecosystem services should help and inform those trying to implement the Ecosystem Approach. Conversely, widening participation in natural resource management should aid attempts to understand and describe ecosystem services.

## Policy & Practice implications

There are implications for all sectors using these terms:

- It is important to be clear – as an individual, an organisation, or a cross-partner team – what concepts you have in mind and your rationale for using them.
- After establishing shared ideas, then discuss what terminology you will employ. You may or may not wish to employ ecosystem service terminology. We suggest using the terms above, but whatever terms you employ, be consistent.
- Once a project team or initiative has checked and agreed its own understanding, then it is important to engage any further stakeholders early, and discuss the ideas and concepts with them, including how these ideas relate to other established concepts or issues that they are familiar with.
- It is easy to blame communication problems on technical terminology, but if all partners have a chance to discuss and consolidate ideas, this is less likely to be problematic.



## Acknowledgements & Research Undertaken

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## Related outputs and further information

- This open access paper expands on these ideas, and provides a hypothetical comparison of the differences between an ecosystem services framework, and an ecosystem approach, for a site in Scotland. *Waylen, K. A., E. Hastings, E. Banks, K. Holstead, J. Irvine, and K. L. Blackstock. In press. The need to disentangle key concepts from "Ecosystem Approach" jargon. Conservation Biology.* <http://dx.doi.org/10.1111/cobi.12331>
- The research that this briefing builds on, and related outputs, is summarised at: <http://www.hutton.ac.uk/projects/ecosystemapproachreview>. Other work on ecosystem services by the James Hutton Institute is available from: <http://www.hutton.ac.uk/ecosystems-services>
- The Ecosystems Knowledge Network (EKN) at <http://ecosystemsknowledge.net/> is a rich source of UK case studies: some attempt the Ecosystem Approach (e.g. <http://ecosystemsknowledge.net/resources/examples/stirling>) whilst others fit closer to the Ecosystem Services Framework (e.g. <http://ecosystemsknowledge.net/resources/examples/keighley-watersheddles/>)