

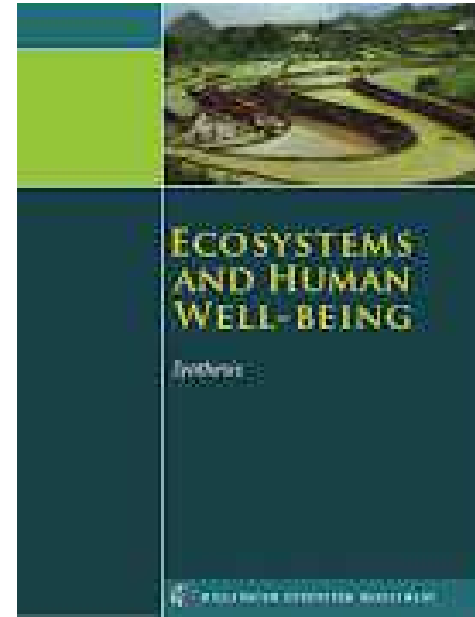
Ten years after the Millennium Ecosystem Assessment: A Global Perspective on Water Ecosystem Services



The James
Hutton
Institute

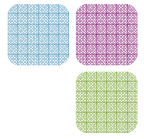
Water World Congress - Special Session convened by Julia
Martin-Ortega, Robert C. Ferrier & Iain J. Gordon
Edinburgh, 27th May 2015

Millennium Ecosystem Assessment launched in 2001 to *'assess the consequences of ecosystem change for human well-being and the scientific basis for action needed to enhance the conservation and sustainable use of those systems'*



Main findings (2005)

- Over the past 50 years, humans have changed ecosystems more rapidly and extensively than in any comparable period of time



The raise of a new 'language'

- Concerns about the effects and dependencies of human life in the natural environment are very long standing (e.g. Malthus 1888's *Principles of Population*, 1972 Club de Rome's *Limits to Growth*, 1992 Rio de Janeiro's *Earth Summit*....)
- The term ecosystem services pre-dates the Millennium Ecosystem Assessment (60s-70s ecological conservation)
- The Millennium Ecosystem Assessment raised a new 'language'
 - Popularization and mainstreaming of the notion of

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UK National Ecosystem Assessment
Understanding nature's value to society

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Contents lists available at ScienceDirect

Ecosystem Services

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

Editorial

ECOSER 6th Volume: Special Issue on Payments for Ecosystem Services

The 6th Volume of Ecosystem Services, the fourth and last of 2013, is the second Special Issue this year. The focus is now on "Payments for Ecosystem Services and Their Institutional Dimensions: Analysing the Diversity of Existing PES Approaches in Developing and Industrialized Countries".

Payments for Ecosystems Services has become a topic surrounded by much debate. Many different views, and at the same time also many myths, exist regarding the usefulness as an instrument in biodiversity or economic policy implementation. There are legitimate questions about the effectiveness of market based, government controlled or mixed approaches in achieving biodiversity conservation goals, sustainable development goals, or economic fairness goals.

The notion of payments for goods and services is old and established in mainstream economics, and can easily be extrapolated, and has been so in ecological economics, to the goods and services produced by ecosystems, be it of course that not the ecosystem is actually paid but the owners or managers of the ecosystems, or those who facilitate the ecosystem based services by their labour and use of technology and fuels. It is therefore not so often the notion of payment flows which is at the heart of debates and the search for effective arrangements, but the context in which the arrangements

Special Issue editors Claudia Sattler and Bettina Matzdorf, have done an impressive job bringing the papers together and providing the Ecosystem Services community with a rich source of ideas and data. That community is hungry for ideas and data, as was clearly visible in Bali, August 2013, where the Ecosystem Services Partnership (ESP) held their 6th Annual Conference with the motto "make ecosystem services count!" The event was again drawing many young scientists from around the world, but especially from Asia and Australia, who brought their work, theoretical and practical, to be tested against the experience of the established scientific seniors. More than 40 workshops and special sessions were addressing the many different issues where ecosystem services are being recognised as scientifically challenging and policy relevant. I trust that in the coming years many of these issues will become visible as papers in Ecosystem Services.

This Special Issue will certainly provide scientists, policymakers and practitioners a few weeks of intensive reading and maybe cause some to write reactions to the papers, which we shall be pleased to publish. I wish you much energy and inspiration in that process.

Department for Environment and Heritage
INSIGHTS | PERSPECTIVES

ENVIRONMENT AND DEVELOPMENT

Get the paying
Few projects

By S. Naeem*, J. C. L. L. Bremer, P. Bu F. DeClerck, C. Fre A. P. Kinzig, A. Kis F. Milano, L. Naug S. Polasky, J. Poter M. T. Vargas, S. Vi

Payments for mechanisms social incent ple influenc achieve con ability goals. goods and services of ecosystems that with payments...

PES

PES是一个工具

Reviews of c methods, and p tions reveal a nu among scientifi ecosystem servi ries (5). Collect services varies and complexity. ing the best an PES proponent scientifically baseline data an itoring program We develop...

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A S

undación Biodiversidad

Biodiversity and ecosystem services scaling up business solutions

Company case studies that help achieve global biodiversity targets

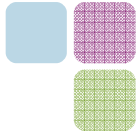
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& ten years have passed

- How much have we moved from theory to practice?
- How far ecosystem services assessments have progressed?
- What are still the main limitations?
- What lessons have been learnt from the different experiences?
- How can we improve application?
- Has this represented a paradigmatic swift?

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Trying to start answering some of these questions...

- This Special Session aims to contribute to a better understanding of what are ‘ecosystem services-based approaches’, how have they being applied in different contexts, what has been achieved, what are the main limitations

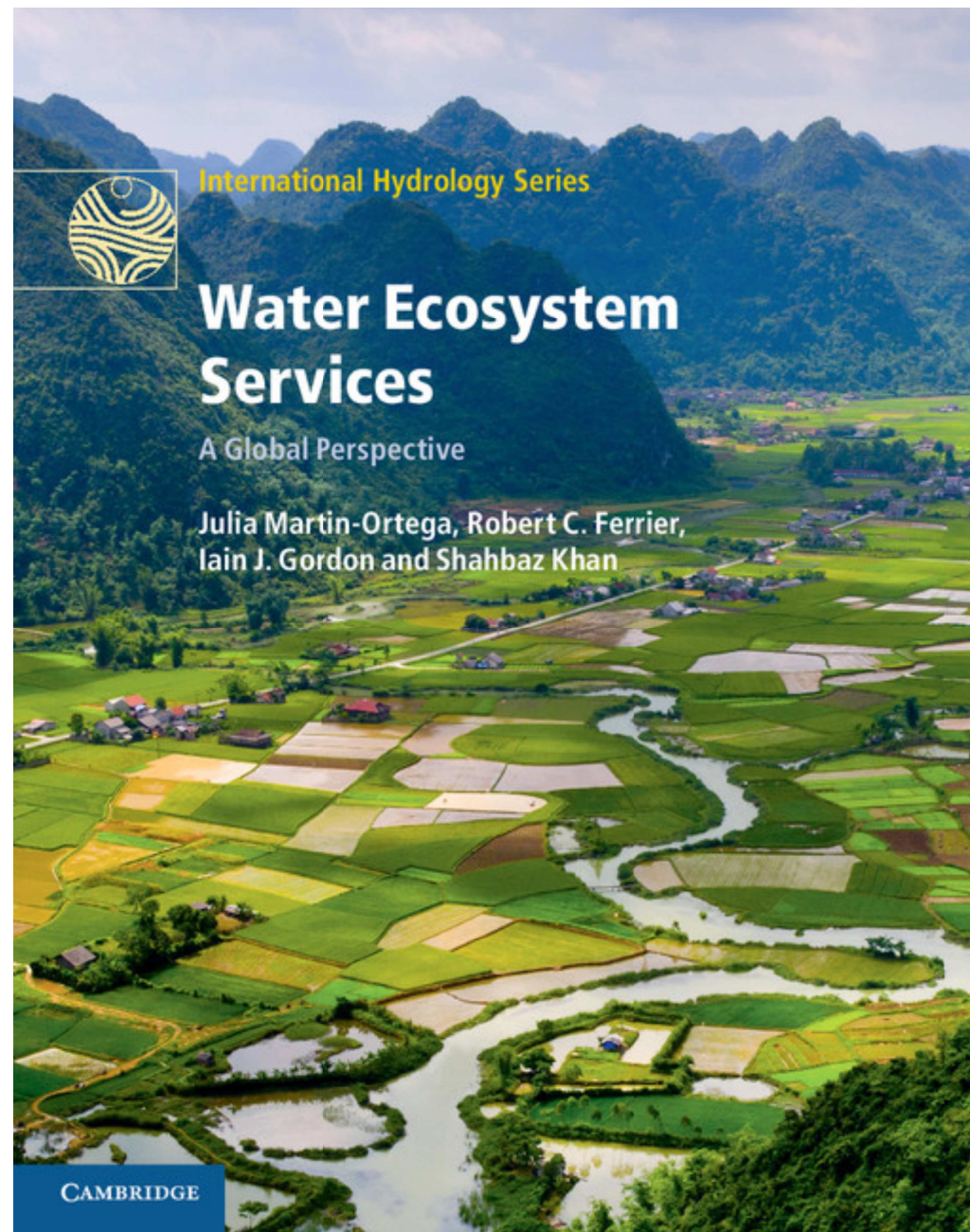
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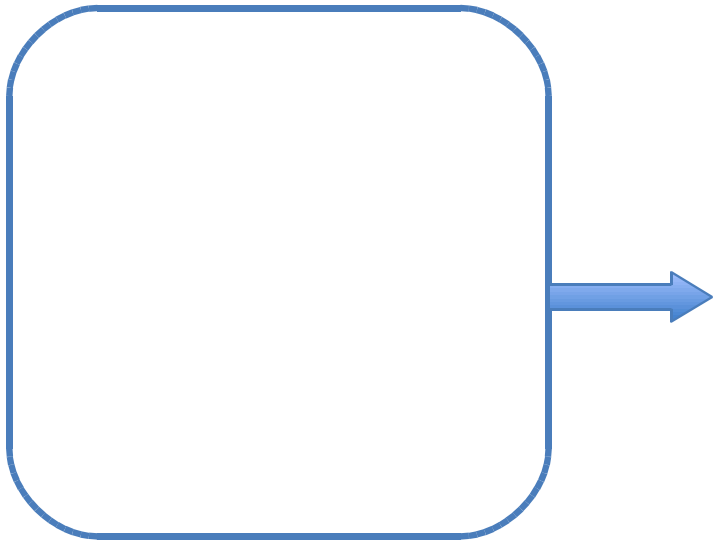
- The water cycle reflects very well the idea of natural capital and services flows impacting on human well-being
- Great amount of research and impact on practice (e.g. vast majority of PES schemes involve water services)



UNESCO's
International
Hydrology
Series
publication by
Cambridge
University
Press



Structure



- **Part I:** how ecosystem services-based approaches can help address *major global challenges* (climate change, food and energy supply and biodiversity loss)
- **Part II:** is the notion of ecosystem services useful in the context of

Today's talks



Defining ecosystem services-based approaches
By **Klaus Glenk, Julia Martin-Ortega & Didac Jorda-Capdevilla**

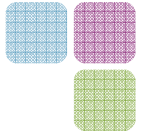
Part I *Assessing climate change risks and prioritising adaptation options using a water ecosystem services-based approach, by **Samantha Capon***

Part II *Implementation of the European Water Framework Directive: what does taking an ecosystem services-based approach add? – by **Kirsty Blackstock***
*Ecosystem services and WFD implementation in Scotland – by **Rebecca Badger***

Part III *Policy support systems for the development of benefit-sharing mechanisms for water-related ecosystem services – by **Mark Mulligan***

Part IV *Ecosystem services-based approaches to water management: what opportunities and challenges for business? – by **Joel Houdet***
*The interface between human rights and ecosystem services – by **Stephen Turner***

Round table Facilitated by **Iain Gordon**



Participating in the discussion

Make your contribution

- Ask questions
- Challenge the speakers
- Raise concerns
- Share your experiences!

Two methods:

- #water_ESWWC

