



Natural Capital

Theory and Practice of Mapping Ecosystem Services

Edited by Peter Kareiva, Heather Tallis, Taylor H. Ricketts, Gretchen C. Daily, and Stephen Polasky

Overview:

- Discusses novel science that focuses on providing standardized valuations of multiple ecosystem services
- Incorporates policy analysis and provides guidance on policy implementation
- Boxed case studies authored by conservation or political leaders from the field
- Common chapter templates and rigorous editing provide a coherent and integrated work
- Reveals tradeoffs among services, as well as opportunities for possible new sources of funding for conservation.

Description:

In 2005, The Millennium Ecosystem Assessment (MA) provided the first global assessment of the world's ecosystems and ecosystem services. It concluded that recent trends in ecosystem change threatened human wellbeing due to declining ecosystem services. This bleak prophecy has galvanized conservation organizations, ecologists, and economists to work toward rigorous valuations of ecosystem services at a spatial scale and with a resolution that can inform public policy.

The editors have assembled the world's leading scientists in the fields of conservation, policy analysis, and resource economics to provide the most intensive and best technical analyses of ecosystem services to date. A key idea that guides the science is that the modelling and valuation approaches being developed should use data that are readily available around the world. In addition, the book documents a toolbox of ecosystem service mapping, modeling, and valuation models that both The Nature Conservancy and the World Wide Fund for Nature (WWF) are beginning to apply around the world as they transform conservation from a biodiversity only to a people and ecosystem services agenda. The book addresses land, freshwater, and marine systems at a variety of spatial scales and includes discussion of how to treat both climate change and cultural values when examining tradeoffs among ecosystem services.

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Lead editor, **Peter Kareiva** has worked as a private consultant, as a Professor at several universities (including Brown University, UCSB and University of Washington), a Director of a Conservation Biology group at NOAA Fisheries, and is now a Vice President and Chief Scientist for The Nature Conservancy, the world's largest environmental NGO with over 500 scientists on staff. His focus has been on applying rigorous quantitative tools to support resource and conservation decisions in a pragmatic manner. He has edited five books and written a conservation science textbook, while mentoring over thirty PhD and postdoctoral students who have gone on to faculty positions and government or non-profit positions around the world. His awards include a Guggenheim fellowship and election to the American Academy of Arts and Science. He has worked in Asia, Latin America and North America and in marine, freshwater and terrestrial ecosystems.

The other editors have a wealth of experience in the field.

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