

Changing the Way We View Humanity and the Rest of Nature

This special issue of *Solutions* is devoted to the idea of ecosystem services—the benefits humans derive from our shared “natural capital” assets, including everything from climate regulation to water supply to pollination to cultural amenities.

The idea that preserving the environment is an asset, rather than an impediment, to economic growth and development is both very old and very new. For most of human history, at least until the start of the Industrial Revolution, the benefits humans derived from nature were well recognized and embedded in various cultural rules and norms. Parts of forests, lakes, or mountains were often deemed sacred and off-limits. But it is no coincidence that these sacred natural assets also supplied essential life-support services for the communities involved.

This is in stark contrast to the postindustrial view in much of the Western world that nature is merely a pretty picture—nice to enjoy if you can afford it but not essential to the more important business of growing the economy. Whenever the issue of conservation of nature has entered the public or political discussion, it has always been purported to come at a cost, and the discussion has been framed as “the environment vs. the economy.”

Probably the most important contribution of the widespread recognition of ecosystem services

is that it reframes the relationship between humans and the rest of nature. An understanding of the role of ecosystem services emphasizes our natural assets as critical ingredients in our overall wealth. Sustaining and enhancing human well-being requires a balance of all of our assets—individual people, society, the built economy, and the rest of nature. This reframing of the way we look at nature is essential to solving the problem of how to build a sustainable and desirable future—a goal that we all share.

This reframing of the way we look at nature is essential to solving the problem of how to build a sustainable and desirable future—a goal that we all share.

This special issue contains articles from several different perspectives about how ecosystem services are helping to solve this mother of all problems.

Interest in ecosystem services has grown rapidly. In 1997 I and 12 coauthors estimated the value of global ecosystem services to be around U.S.\$33 trillion per year, a figure larger than global gross domestic product (GDP) at the time.¹ This admittedly crude underestimate, and a few other early studies, stimulated a huge surge in interest in this topic.

In 2005 the concept of ecosystem services gained broader attention when the United Nations published its Millennium Ecosystem Assessment (MEA).² The MEA was a four-year, 1,300-scientist study for policymakers. In this issue of

Solutions, Walt Reid, director of the MEA, revisits this project and explains its impacts.

In 2008 a second international initiative was undertaken by the UN Environment Programme, called the Economics of Ecosystems and Biodiversity (TEEB).³ The TEEB report was picked up extensively by the mass media, bringing ecosystem services to a broader audience.⁴

Ecosystem services have now even entered the consciousness of mainstream media and business. Hundreds of projects and groups are currently working toward better understanding, modeling, valuation, and management of ecosystem services and natural capital. It would be impossible to list all of them here, but emerging global, national, and regional networks are doing just that and are coordinating their efforts.^{5,6}

Ecosystem services are now poised to provide real solutions to the problem of how to sustainably manage our critical natural capital assets. The contents of this special issue show examples of how that can be done. **S**

REFERENCES

1. Costanza, R et al. The value of the world's ecosystem services and natural capital. *Nature* 387, 253–260 (1997).
2. Millennium Ecosystem Assessment. *Living beyond Our Means: Natural Assets and Human Well-Being* [online] (United Nations, New York, 2005). www.maweb.org/documents/document.429.aspx.pdf.
3. Sukhdev, P et al. *The Economics of Ecosystems and Biodiversity (TEEB): Mainstreaming the Economics of Nature; A Synthesis of the Approach, Conclusions and Recommendations of TEEB* [online] (UN Environment Programme, 2010). www.teebweb.org/TEEBsynthesisReport/tabid/29410/Default.aspx.
4. Sukhdev, P. Putting a price on nature: the economics of ecosystems and biodiversity. *Solutions* [online] 1(6), 34–43 (2011). www.thesolutionsjournal.com/node/823.
5. The Ecosystem Services Partnership [online]. www.es-partnership.org.
6. Ecosystem Services and Poverty Alleviation [online]. www.nerc.ac.uk/research/programmes/esp.