

Nature as Capital

In the decade since publication of the landmark U.N. Millennium Ecosystem Assessment, scientists, policymakers, nonprofit organizations and corporations have worked together to incorporate the value of nature in economic and social development plans. The striking accomplishments of these partnerships are profiled in a new series of research papers published in the June 16, 2015 *Proceedings of the National Academy of Sciences*. The Special Feature shows how the science and practice of ecosystem services—the benefits nature provides—has matured. Many of the authors work in collaboration with The Natural Capital Project, a joint initiative of The Nature Conservancy, the Stanford Woods Institute for the Environment, the University of Minnesota Institute on the Environment and World Wildlife Fund. The Special Feature was led and edited by University of Minnesota economist Steve Polasky and Oregon State University ecologist Jane Lubchenco. See the collected abstracts at PNAS: http://www.pnas.org/cgi/collection/nature_capital

About the Natural Capital Project

The Natural Capital Project (NatCap) envisions a world in which people, governments, and other institutions recognize the values of nature—embodied in Earth's lands, waters, and biodiversity—in supporting human well-being, and routinely incorporate these values into decision-making. NatCap develops simple, use-driven approaches to valuing nature, works closely with decision makers, and provides free, open source ecosystem service software tools to a broad community of users. NatCap works with leaders around the world to test and demonstrate how accounting for nature's benefits can support more sustainable investment and policy decisions.



natural
capital
PROJECT

WASHINGTON D.C. EXPERT DISCUSSION



Integrating Natural Capital into Decisions

Speakers and panelists will highlight the latest advances in the science and practice of using ecosystem services to inform decisions. The discussion will provide insights into how this information can best be used by government agencies, multilateral institutions, and the broader sustainable development community to structure and implement policies that are simultaneously sound from environmental and economic perspectives.

A panel of leading experts, including authors from a June 2015 Special Feature of the *Proceedings of the National Academy of Sciences* on “Nature as Capital,” will discuss key components of bringing natural capital considerations into mainstream decision making on issues such as agriculture, energy, infrastructure, urban planning, finance, and national security.

Opening Remarks

LYNN SCARLETT
Managing Director for Public Policy,
The Nature Conservancy

Moderator

STEVE POLASKY
University of Minnesota, Department of Applied
Economics and Institute on the Environment;
Natural Capital Project

Panelists

ANN BARTUSKA
Deputy Under Secretary for Research,
United States Department of Agriculture

MICHELE LEMAY
Natural Resources Lead Specialist, Biodiversity
and Ecosystems Program, Inter-American
Development Bank

TOM DILLON
Senior Vice President for Forests and Freshwater,
World Wildlife Fund (WWF)

MARY RUCKELSHAUS
Managing Director, Natural Capital Project;
Consulting Professor, Stanford Woods Institute
for the Environment

June 30, 2015 9 to 11 a.m. Resources for the Future Washington, D.C.

PANELISTS



Ann M. Bartuska is Deputy Under Secretary for USDA's Research, Education, and Economics (REE) mission area. She came to REE in September, 2010 from the USDA Forest Service, where she was Deputy Chief for Research & Development, a position she had held since January 2004. She served as Acting USDA Deputy Undersecretary for Natural Resources and Environment from January - October of 2009, and was the Executive Director of the Invasive Species Initiative of

the Nature Conservancy from 2001-2004. Prior to this, she was the Director of the Forest and Rangelands staff in the Forest Service in Washington, D.C. Bartuska is an ecosystem ecologist with degrees from Wilkes College (B.S.), Ohio University (M.S.) and West Virginia University (Ph.D.). She represents USDA on the Committee on Environment, Natural Resources and Sustainability of the White House National Science and Technology Council.



Tom Dillon leads the WWF teams focused on the global forest goal of ending deforestation and protecting ecosystems as well as the freshwater goal of improving the sustainability of the world's major river basins. Previously, Tom oversaw WWF's field programs, working to conserve large ecosystems in the Amazon, the Arctic, Coastal East Africa, the Coral Triangle and the Himalayas. He also directed the species program, addressing threats to sea turtles, tigers, elephants, rhinos and cetaceans. Since joining WWF in 1993, he has spearheaded some of the world's most important conservation initiatives, including the Amazon Region Protected Areas (ARPA) Program in Brazil protecting 150 million acres, and the Terai Arc program of Nepal and India that is using a community based approach to restore tiger populations and conserve habitat. While living in Vietnam and Laos, Tom established WWF's Greater Mekong Program. He holds a master's degree from Yale University's School of Forestry and Environmental Studies.

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Michele Lemay has headed the IDB Biodiversity and Ecosystem Services (BIO) Program since its inception in 2012. She also spearheads pilot initiatives aimed at mainstreaming natural capital in economic sectors such as tourism in Belize and in development planning The Bahamas. As lead natural resources specialist, she oversees multi-disciplinary project teams in the design and analysis of public sector investment loans and grants in integrated coastal zone management, fisheries, tourism, marine conservation and land tenure security throughout Latin America and the Caribbean. Prior to joining the IDB in 1992, Lemay worked with the National Oceanic and Atmospheric Administration (NOAA) in marine protected area planning and management and with the Coastal Resources Center of the University of Rhode Island piloting integrated coastal zone management programs in Latin America and Asia. In 1998, Lemay authored the IDB's first institution-wide strategy for coastal and marine resources management, marking the transition towards an ecosystem-based approach to economic sectors in the coastal zone.

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Lynn Scarlett is worldwide Managing Director for Public Policy at The Nature Conservancy (TNC). In this role, Scarlett directs all policy in the United States and the 35 countries in which TNC operates. Scarlett previously served as the Deputy Secretary and Chief Operating Officer at the U.S. Department of the Interior and as the Acting Secretary in 2006. While Deputy Secretary, Scarlett initiated and chaired the Department's Cooperative Conservation Working Group and its Climate Change

Task Force. She also established the Ocean and Coastal Activities office to coordinate ocean and coastal work, chaired the nation's Wildland Fire Leadership Council, and served on the Executive Committee of the President's Management Council. She has authored numerous publications on climate change adaptation, ecosystem services, large landscape conservation, and science and decision-making. She received her bachelor's and master's degrees in political science from UC Santa Barbara, where she also completed her Ph.D. in political science and political economy.



Mary Ruckelshaus is Managing Director for the Natural Capital Project and a consulting professor with the Stanford Woods Institute for the Environment. Based in Seattle, WA, she previously led the Ecosystem Science Program at NOAA's NW Fisheries Science Center. Prior to that, she was Assistant Professor of biological sciences at Florida State University (1994-1997). Her current primary research focus is developing ecological models including estimates of the flow of environmental services

under different management regimes in marine systems worldwide. Ruckelshaus serves on The Nature Conservancy Science Council, TNC's Washington Board, and is past chair of the Science Advisory Board, National Center for Ecological Analysis and Synthesis (NCEAS). She was Chief Scientist for the Puget Sound Partnership, a public-private institution recovering the Puget Sound terrestrial, freshwater and marine ecosystems. Ruckelshaus holds a bachelor's degree in human biology from Stanford University, a master's degree in fisheries and a doctoral degree in botany, from the University of Washington.

MODERATOR



Steve Polasky is a Regents Professor and the Fesler-Lampert Professor of Ecological/Environmental Economics at the University of Minnesota. His research interests focus on issues at the intersection of ecology and economics and include the impacts of land use and land management on the provision and value of ecosystem services and natural capital, biodiversity conservation, sustainability, environmental regulation, renewable energy, and common property resources. He served as Senior

Staff Economist for environment and resources for the President's Council of Economic Advisers 1998-1999. He serves on the Science Advisory Board for EPA and NOAA. He serves on the Board of Directors and the Science Council for The Nature Conservancy. He is a fellow of the Association of Environmental and Resource Economists, the American Academy of Arts and Sciences, and the American Association for the Advancement of Science. He was elected into the National Academy of Sciences in 2010. He received a Ph.D. in economics from the University of Michigan in 1986.