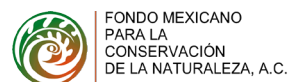


# 2010 Katoomba Meeting XVI Palo Alto, California

February 9-10, 2010  
Moore Foundation  
1661 Page Mill Rd  
Palo Alto, CA 94304

*Building a Blueprint to Harness New Investment for the  
Protection of Marine and Coastal Ecosystem Services*



# SPONSORS & PARTNERS

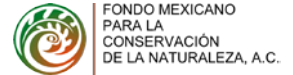
---



# CO-HOSTS

---

**FONDO MEXICANO PARA LA CONSERVACIÓN DE LA NATURALEZA (FMCN)**, or the Mexican Fund for the Conservation of Nature, is an independent, non-profit organization founded in 1994. It has 15 years of experience financing and supervising conservation projects. During the last 12 years FMCN has supported over 800 projects with a total of more than 60 million dollars. FMCN raises funds principally from international entities and private foundations. The mission of FMCN is to financially support and strengthen efforts for the conservation and sustainable use of biodiversity in Mexico. Its vision is that Mexico will reverse the process of deterioration of its ecosystems, and Mexican society will value its biodiversity. FMCN guarantees donors and partners the effective and transparent use of resources. ([www.fmcn.org](http://www.fmcn.org))



**THE GORDON AND BETTY MOORE FOUNDATION**, Established in September 2000, the Gordon and Betty Moore Foundation seeks to improve the quality of life for future generations. The Foundation's science-based, results-driven orientation stems from the principles and interests of Gordon and Betty Moore. The Foundation operates proactively in three specific areas of focus—environmental conservation, science, and the San Francisco Bay Area—where a significant and measurable impact can be achieved. In addition to Initiative-based grantmaking, the Foundation is providing significant funding to Conservation International, the California Institute of Technology, the Thirty-Meter Telescope, and the Betty Irene Moore School of Nursing. ([www.moore.org](http://www.moore.org))



**THE KATOOMBA GROUP** seeks to address key challenges in developing markets for ecosystem services, from enabling legislation to the establishment of new market institutions, to strategies of pricing and marketing, and performance monitoring. It seeks to achieve this goal through strategic partnerships for analysis, information-sharing, investment, market services and policy advocacy. The Katoomba Group includes over 180 experts and practitioners from around the world representing a unique range of experience in business finance, policy, research and advocacy. ([www.katoombagroup.org](http://www.katoombagroup.org))



**FOREST TRENDS** is an international, non-profit organization that focuses on market-based mechanisms because of their powerful and lasting means of: ensuring the maintenance of ecological functions and services provided by forests and other ecosystem services; generating economic benefits; and promoting the equitable distribution of benefits among diverse stakeholders. Our approach integrates the fundamental dimensions of ecology, economy, and equity because our goal is for impact of a scale that is meaningful globally. ([www.forest-trends.org](http://www.forest-trends.org))



**FOREST TRENDS' MARINE ECOSYSTEM SERVICES (MARES) PROGRAM** is focused on marine and coastal markets and market-like mechanisms for conservation and effective management. Its initial focus on four key ecosystem services allows field-testing of concepts developed for land and forest conservation, and has already begun to build a community of practice around coastal PES, coastal and marine conservation banking, and marine biodiversity offsets.



# MARES Advisory Committee

---

**LAURETTA BURKE**

Senior Associate  
People and Ecosystems Program  
World Resources Institute

**INDUMATHIE HEWAWASAM**

Marine Policy Specialist  
Consultant  
The World Bank and  
The Nature Conservancy

**BONNIE MCCAY**

Board of Governors Distinguished Service Professor  
Rutgers University

**ROBERT REPETTO**

Senior Fellow, United Nations Foundation  
Senior Fellow, Clean Air-Cool Planet

**JAMES N. SANCHIRICO**

Professor  
Environmental Science and Policy  
University of California, Davis  
Non-resident Fellow  
Resources for the Future

**MAREA E. HATZIOLOS**

Senior Coastal and Marine Specialist  
Environment Department  
The World Bank Group

**JUDITH KILDOW**

Director  
The National Ocean Economics Program  
Private Consultant

**STEVE MURAWSKI**

Director of Scientific Programs  
& Chief Science Advisor  
NOAA Fisheries Service  
National Oceanic & Atmospheric Administration

**J.B. RUHL**

Matthews & Hawkins Professor of Property  
Florida State University College of Law

**DANIEL O. SUMAN**

Professor  
Rosenstiel School of Marine and Atmospheric  
Science  
University of Miami

# Meeting Overview

---

The Katoomba Group is an international network working to promote and improve capacity related to markets and payments for ecosystem services (PES). The mission of the Katoomba Group is threefold: to identify and respond to gaps in PES theory and practice; share intelligence about new developments related to PES markets; and address key PES challenges, such as engaging private sector buyers and enabling progress on legal, policy and institutional frameworks.

Forest Trends began working in the coastal and marine arena in 2005, as it expanded its proven work in catalyzing partnerships to protect ecosystem services and develop ecosystem markets to new biomes. The marine ecosystem is ripe for such attention, given that many conventional management measures suffer from insufficient resources for effective management.

This Marine and Coastal Katoomba Meeting capitalizes on ever-expanding interest in finding innovative solutions to conserve our marine environment and resources, in order to safeguard human well-being. The dialog around market-based mechanisms has to-date focused on fishery catch shares and quota markets. Rather than focusing on the state of existing marine and coastal markets, we will instead concentrate on developing new financing tools and approaches and expanding the use of market-based mechanisms to other services, such as coastline stabilization, beach maintenance and production, fish nursery functions of mangroves and seagrass beds, coastal water quality and ocean carbon storage.

## **Intended Outcomes:**

- Catalyze the building of a global community of practice to support payment for ecosystem services (PES) and other innovative financing mechanisms for marine and coastal conservation;
- Create a strategy to reach consensus on a “blueprint for action” to guide future marine PES, offsets, and other market-based solutions to marine conservation problems;
- Lay the groundwork for developing a global set of marine PES test projects among public and private sector partners; and
- Distribute meeting outputs to inform policy makers, industry leaders, resource managers, conservation organizations, and coastal communities.

**This meeting will be the first in a series to strategize and develop action plans for realizing the potential of market-based mechanisms as a tool for conserving marine ecosystems and their services.**

- **Day 1:** We will lay out the concepts on marine ecosystem services and market-based conservation mechanisms, e.g., experiences and ideas, lessons learned and best practices, particularly in the fisheries and water sectors.
- **Day 2:** We will look ahead at the new framing on coastal and marine resource use, management, and policies that the ecosystem services paradigm has already begun stimulating.

Marine and coastal PES systems and associated market offsets have the potential to achieve significantly better and more cost-effective conservation outcomes than currently result from projects which seek to isolate and protect coastal areas from human encroachment. By clarifying the linkages between ecological structure and function, ecosystem service delivery, and market incentives market-based conservation mechanisms could become a standard tool to lower risk and increase efficacy of management.

# Agenda

*Note: Conference agenda may be subject to last minute changes.*

---

## TUESDAY, FEBRUARY 9

**VENUE:** Gordon and Betty Moore Foundation, Palo Alto, CA

**OBJECTIVE:** To lay out the concepts on marine ecosystem services and market-based conservation mechanisms, e.g., experiences and ideas, lessons learned and best practices, particularly in the fisheries and water sectors.

**8:00 – 8:45 am** DOORS OPEN & REGISTRATION

**8:45 – 9:15 am** WELCOME

Michael Jenkins, *President & CEO, Forest Trends*  
Steve McCormick, *President, Moore Foundation*  
Amber Mace, *Assistant Secretary for Coastal Matters, California Natural Resources Agency and Executive Director, California Ocean Protection Council*

**9:15 – 10:15 am** OPENING

**Katoomba Dialogue – Environmental Markets and PES: Bridges that Span New Terrain in Marine and Coastal Ecosystem Services**

The enormous value of ecosystem services is generating much attention. The public, decision-makers, and the business community are beginning to understand why protecting the habitats that provide those services benefits not only local communities and national economies, but also private sector investors.

**Panelists**

Ricardo Bayon, *EKO Asset Management Partners*  
Tundi Agardy, *Forest Trends*  
Lorenzo Rosenzweig, *Fondo Mexicano para la Conservación de la Naturaleza*  
Albert Cho, *Cisco Systems/Planetary Skin Institute*

**10:15 – 10:30 am** Innovative Financing with the Greatest Potential – the Foci of the MARES Initiative  
Winnie Lau, *MARES Program, Forest Trends*

A myriad of emerging marine markets and market-like mechanisms exist to enhance conservation and create business opportunities for investors. The MARES Program of Forest Trends has been at the forefront of these new initiatives, focusing on the development of the first Marine Katoomba event to launch a new community of practice around marine markets.

**10:30 – 11:00 am** COFFEE BREAK

## TUESDAY, FEBRUARY 9 CONTINUED

- 11:00 – 11:30 am      **USING SCIENCE TO UNCOVER THE IMMENSE VALUE OF MARINE ECOSYSTEM SERVICES**  
*Mary Ruckelshaus, NOAA & Natural Capital Project*
- Marine systems provide multiple high-value services. We investigate different sectors and the ecosystem services that support them, and the role of PES can play in minimizing risk and clarifying jurisdictions, rights, and responsibilities in the protection of key ecosystem services.
- 11:30 – 12:45 pm      **FRESHWATER-TO-SALTWATER-TO-SEAFOOD QUALITY MARKETS**
- Maximizing the Success of Market Tools in Ensuring Clean Water**  
*Linda Sheehan, California Coastkeeper Alliance*
- Developing a Water Fund to Conserve Watersheds in the Andes**  
*Alejandro Calvache, The Nature Conservancy*
- Water Quality for Corporate Welfare: Coastal and Marine Resource Dependence on Clean Water**  
*Al Appleton, former New York City Department of Environmental Protection Commissioner*
- Integrated Watershed and Coastal Management: Tribal Parks**  
*Eli Enns, Tla-o-qui-aht First Nations, British Columbia, Canada*
- 12:45 – 1:45 pm      **LUNCH**
- 1:45 – 3:00 pm      **ENGAGING WITH THE TOURISM SECTOR IN PROTECTION OF MARINE BIODIVERSITY**
- Protecting Shorelines and Beaches: Natural Coastal Infrastructure for the Sun, Sand, and Beach Tourism Industry**  
*Lauretta Burke, World Resources Institute*
- Integrated Management across Landscapes and Seascapes is the Key to Protecting Services**  
*Peter Mumby, University of Exeter*
- Beyond Simply Ecotourism: Minimizing Risk and Enhancing Value**  
*Rick MacPherson, Coral Reef Alliance*
- The Private Marine Park Model for Maintaining Healthy Coral Reefs for High-Value Tourism**  
*Sibylle Riedmiller, Chumbe Island Coral Park, Inc., Tanzania*
- 3:00 – 4:15 pm      **OFFSHORE DEVELOPMENT: IMPLICATIONS FOR BUSINESS, COMMUNITIES AND GOVERNMENT**
- Developing and Harvesting Marine Energy Sustainably**  
*Tina Taylor, Electric Power Research Institute*
- Using Marine Spatial Planning to Protect our Oceans and Foster Smart Renewable Energy Development**  
*Seth Kaplan, Conservation Law Foundation*
- Sustainably Managing the Twin Marine Resources of Fish and Offshore Wind Energy**  
*Daniel Cohen, Fishermen's Energy*
- Offshore Resource Development for People, Environment, and Business**  
*Odigha Odigha, Government of Cross River State, Nigeria*

## TUESDAY, FEBRUARY 9 CONTINUED

4:15 – 4:45 pm	COFFEE BREAK
4:45 – 6:00 pm	<p>NEW DIRECTIONS IN FISHERIES MARKETS FOR SUSTAINABLE HARVESTING</p> <p>Marine Fisheries Quota Markets <i>Jim Sanchirico, University of California, Davis</i></p> <p>Curbing Unsustainable By-Catch Practices: Case Study of the Alaskan By-Catch Cap-and-Trade Market <i>Joe Plesha, Trident Seafoods</i></p> <p>The Importance of Collaboration among Stakeholders in Sustainable Fisheries <i>Alejandro Robles, Noroeste Sustentable</i></p> <p>Sustainable Aquaculture <i>Jose Villalon, World Wildlife Fund</i></p>
6:00 – 6:45 pm	<p>MOVING FORWARD IN FORGING NEW MARKET-BASED APPROACHES AND TOOLS IN CONSERVING MARINE AND COASTAL RESOURCES</p> <p><i>Judy Kildow, The National Ocean Economics Program</i></p>
7:00 – 9:00 pm	<p>EVENING RECEPTION</p> <p>Keynote Speaker <i>Martha Isabel (Pati) Ruiz Corzo, Sierra Gorda Biosphere Reserve, Mexico</i> <i>Larry Collins, San Francisco Crab Boat Owners Association</i></p>

## WEDNESDAY, FEBRUARY 10

**VENUE:** Gordon and Betty Moore Foundation, Palo Alto, CA

**OBJECTIVE:** Looking ahead at the new framing on coastal and marine resource use, management, and policies that the ecosystem services paradigm has already begun stimulating.

**9:00 – 9:15 am** **WELCOME AND REVIEW OF GOALS FOR THE DAY**

Michael Jenkins, *Forest Trends*

**9:15 – 10:00 am** **KEYNOTE PRESENTATION**

**The Role of Community and Other Institutions in Providing Innovative Solutions for Marine and Coastal Conservation**

Bonnie McCay, *Rutgers University*

Community and other institutions, both formal and informal, play a critical role in setting the stage for development of marine markets and market-like mechanisms. But communities can also be at risk from private sector investment, if issues of equity, access, common property, and governance are not well understood and appreciated.

**10:00 – 10:30 am** **COFFEE BREAK**

**10:30 – 12:00 pm** **PANEL PRESENTATION**

**Solving Open Access Issues in Marine and Coastal Resource Utilization**

Government policies can steer use so it is sustainable, even in the open access domain of oceans. While some policies can also drive marine market development, the spectrum of market mechanisms can also positively influence government policies. The use of marine protected areas, marine spatial planning, and community-based management have all been used to protect ecosystem services and secure the sustainability of financing for conservation.

**Moderator** – Indumathie Hewawasam, *Marine Policy Specialist*

**How the National Biodiversity Law Supports the Development of Marine and Coastal PES**

Huynh Thi Mai, *Ministry of Natural Resources and Environment, Vietnam*

**Implications of Marine Spatial Planning – the View from Massachusetts**

Stephanie Moura, *Massachusetts Ocean Partnership*

**Lessons Learned from Mexico's National Terrestrial PES Law for Developing Marine PES Law**

Carlos Muñoz Piña, *National Institute of Ecology, Mexico*

**Limited Access Areas and Regional Sustainable Tourism Development in the Red Sea**

Amr Ali, *Hurghada Environmental Protection and Conservation Association, Egypt*

**Harnessing Use Rights and Access Rights under Marine Protected Areas for Marine and Coastal PES in Kenya**

Nyawira Muthiga, *Wildlife Conservation Society*

**12:00 – 1:00 pm** **LUNCH**

## WEDNESDAY, FEBRUARY 10 CONTINUED

1:00 – 2:15 pm	<p><b>THE ROLE OF CIVIL SOCIETY IN CATALYZING MARKET-BASED MARINE CONSERVATION</b></p> <p><b>Moderator</b> – Dan Suman, <i>University of Miami</i></p> <p><b>Developing a Marine Fund for Marine Conservation</b> <i>Astrid Scholz, Ecotrust</i></p> <p><b>Multi-stakeholder Public-Private Collaboration to Move PES Agenda Forward in the Philippines</b> <i>Rina Rosales, Resources, Environment and Economics Center for Studies, Inc., Philippines</i></p> <p><b>Toward a Legal Framework for Integrated Stakeholder Rights to Marine and Coastal Ecosystems</b> <i>Andrea Saenz-Arroyo, Comunidad y Biodiversidad A.C., Mexico</i></p> <p><b>Development of Market-based Conservation Initiatives in Mexico</b> <i>Enrique Sanjurjo, World Wildlife Fund -Mexico</i></p>
2:15 – 2:30 pm	<p><b>INSIGHTS FROM COPENHAGEN AND THE ROAD FORWARD FOR OCEANS, COASTS, AND CLIMATES</b></p> <p><i>Andreas Merkl, ClimateWorks</i></p>
2:30 – 3:45 pm	<p><b>BLUE CARBON: EXTENDING TERRESTRIAL CARBON MARKETS TO COVER MARINE AND COASTAL CARBON POOLS</b></p> <p>Preserving forests and reducing deforestation have been thought to be keys to combating the impacts of climate change. However, recent research shows that the oceans and coastal ecosystems can store comparable if not greater amounts of carbon than forests. It is time to include coastal and marine carbon pools in the carbon market dialogs.</p> <p><b>Moderator</b> – Robert Repetto, <i>United Nations Foundation &amp; Clean Air-Cool Planet</i></p> <p><b>Blue Carbon: Carbon Accounting in Marine and Coastal Environments</b> <i>Richard Kenchington, United Nations Environment Programme</i></p> <p><b>Integrated Green and Blue Carbon Management : How to make it work</b> <i>Joerg Seifert-Granzin, Katoomba Group</i></p> <p><b>Developing Methodologies for Mangrove Carbon Assessment</b> <i>Walter Vergara, World Bank</i></p> <p><b>The Nuts and Bolts of Carbon Markets and How to Incorporate Blue Carbon into the Market</b> <i>Marc Stuart, EcoSecurities</i></p>
3:45 – 4:15 pm	<p><b>COFFEE BREAK</b></p>

## WEDNESDAY, FEBRUARY 10 CONTINUED

4:15 – 5:45 pm

### THE ROLE OF PRIVATE SECTOR IN FORGING MARINE ECOSYSTEM SERVICES MARKETS

Governments, academia, and NGOs all play a role in crafting solutions to the loss of ecosystem services, and along with communities and the private sector, can help shape a future in which ecosystem services are not just protected, but are the basis for profitable investing.

**Moderator** – Marea Hatziolas, *The World Bank*

#### The Role of Insurance in Protecting Marine and Coastal Ecosystems

Adam Cole, *California Department of Insurance*

#### What One Insurer is Doing to Manage Climate Risk

Stephen Bushnell, *Fireman's Fund Insurance Company*

#### Private Sector Leadership and Collaboration in Sustaining Marine Ecosystem Services

Paul Holthus, *World Ocean Council*

#### Employing Market-based Mechanisms Towards Sustainable Fisheries

Jim Cannon, *Sustainable Fisheries Partnership* (tbc)

#### Creating the Right Conditions for Private Sector Investment

Bettina von Hagen, *Ecotrust*

5:45 – 6:30 pm

### MEETING WRAP UP

Tundi Agardy, *MARES Program, Forest Trends*

## SPEAKERS

---



**Tundi Agardy** is an internationally renowned expert in marine conservation, with extensive field and policy experience in Africa, Asia, the Caribbean, the Mediterranean, North America, and the Pacific. Tundi specializes in coastal planning and assessment, marine protected areas, fisheries management and ocean zoning, and has published widely in these fields. She founded Sound Seas in 2001 as an independent group working at the nexus of policy and science to promote marine conservation. At Forest Trends, she is heading up the MARES initiative – a program looking to protect Marine Ecosystem Services through Payments for Ecosystem Services (PES) markets. Tundi works with international think tanks, foundations, multilaterals, museums and academic institutions, environmental groups, and consortia with interest in solving local and regional coastal and marine conservation problems. She completed her undergraduate work at Wellesley and Dartmouth Colleges and then received her Ph.D. in biological sciences and Masters in Marine Affairs from the University of Rhode Island and was postdoctoral fellow at the Woods Hole Oceanographic Institution.



**Amr Ali Hasan** was born in Kuwait in 1971 and is an Egyptian National. After studying at the American University in Cairo, Amr chose to combine his love of nature and the environment as a PADI Scuba Diving Instructor in the Red Sea. Amr was soon elected as a diving safari representative on the Board of Directors for HEPCA (Hurghada Environmental Protection and Conservation Association), which were undertaking a pioneering and ambitious project to develop, install and maintain a mooring system throughout the entire Egyptian Red Sea. Amr stepped into the role of managing this project, which would later become the largest and most significant mooring project in the world. In 2004 Amr was appointed the Managing Director of HEPCA. Under his leadership, the organization has become the leading NGO operating in the field of marine and environmental conservation in Egypt, and a model for similar organizations throughout the Middle East and Africa.



**Al Appleton** is an international infrastructure and environmental consultant with interlocking expertise in water resource and water utility management, infrastructure economics and public finance, land use and landscape preservation, the economics of sustainable development and the use of financial strategies such as Payment for Ecosystem Services (PES). His most recent work includes advising a network of Mid-Atlantic environmental and civic groups, and assessing proposals for the introduction of new ecosystem service programs into the State of Sao Paulo, Brazil. Since the mid-1990s, Mr. Appleton has done sustainable development and ecosystem services development work in numerous foreign countries as well as the United States. He serves as a special advisor to Cooper Union on the creation and programming of the new Cooper Union Institute for Sustainable Design (CISD). During the first half of the 1990s, Mr. Appleton served as Commissioner of the New York City Department of Environmental Protection (DEP) and Director of the New York City Water and Sewer system, where he developed and implemented groundbreaking innovations. He also initiated the Staten Island Bluebelt System. Mr. Appleton's academic training was in Pure Mathematics, Political Science and Law.



**Ricardo Bayon** is a Partner and co-founder of EKO Asset Management Partners, a new breed of “merchant bank” seeking to influence, encourage, and profit from new and emerging markets for environmental commodities. The company will invest in a variety of asset classes and types related to these new markets. Previously, he helped found and served as the Managing Director of the “Ecosystem Marketplace,” a web site and information/analysis service covering these emerging environmental markets. In that capacity he co-authored a number of publications on voluntary carbon markets, including “The State of Voluntary Carbon Markets 2007: Picking up Steam” and “Voluntary Carbon Markets: An International Business Guide to What They Are and How They Work”. His most recent publication on markets for biodiversity, entitled “Conservation and Biodiversity Banking: A Guide to Setting Up and Running Biodiversity Credit Trading System” has just been published by Earthscan in London. For nearly two decades he has specialized on issues related to finance, banking, and the environment.



**Laurretta Burke** is trained as an environmental policy analyst and geographic information systems (GIS) specialist. Currently she is developing improved information tools to support environmentally sustainable development. Laurretta Burke is a Senior Associate in the People and Ecosystems Program of the World Resources Institute. Trained as an environmental policy analyst and geographic information systems (GIS) specialist, she focuses on the development of improved information tools to support environmentally sustainable development. Prior to joining WRI, Ms. Burke implemented a GIS in Guyana to support urban infrastructure rehabilitation planning; managed integrated GIS development and training projects; established a GIS for the Environmental Studies program of the Central European University; and performed analysis on the impact of potential climate change on fisheries, wetlands and biological diversity for U.S. EPA’s Global Climate Change Program. Her current emphasis is on watershed-based analysis of threats to coral reefs and economic valuation of coastal resources.



**Stephen Bushnell CPCU, ARM** is a Senior Director at Fireman's Fund Insurance Company in Novato California, responsible for development of innovative products and services for emerging industries. In 2006 he developed the first Green Building Insurance Coverage in the industry. Steve has spoken on the unique risks of green buildings and sustainable business at several conferences including NEOCON, GreenBuild Ceres, TFM, UCLA, University of Wisconsin, Ohio State, GreenSense, Greening the Heartland, World Wildlife Fund Climate Savers Summit and BOMA. He was recently elected to the USGBC Redwood Empire Chapter Board of Directors. He also serves on the Steering Committee of the California Sustainability Alliance, the Advisory Board of the Green California Summit, the UL Environmental Advisory Council and the Allianz Climate Change Center of Competency.



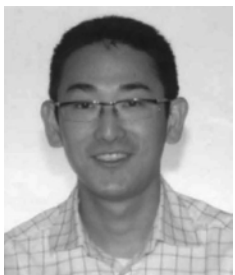
**Alejandro Calvache** is a Watershed Specialist for the Northern Tropical Andes & Southern Central America Conservation Program (NASCA) at The Nature Conservancy in Colombia. The NTA program leads conservation strategies for effective protection of ecologically important lands and waters for nature and people in Northern Peru, Ecuador, Colombia, and Venezuela. Alejandro has also worked for Parque Tecnológico de Antioquia as a Senior Consultant, Corporation for Sustainable Management of Forests ("Masbosques") as the Executive Director, and the Ministry of Transport of Colombia (National Institute for Concessions INCO) as a UNDP Adjoin Consultant. Alejandro is working on his PhD in Geography and Urban Development at the Institut des Hautes

Etudes de l'Amérique Latine Université de Paris III Sorbonne Nouvelle. He has a MSc in Geopgraphy and Urban Development, and a B.A. in Economics.



**Jim Cannon** is CEO of the Sustainable Fisheries Partnership, which he founded in 2006. SFP is an NGO that focuses on improving overfished and destructive capture fisheries and reducing the environmental impacts of fish-farming. SFP educates major customers and their supply chains about environmental and sustainability problems in the fisheries and farms they source from. SFP convenes suppliers and producers together in Fishery and Aquaculture Improvement Projects to agree and implement practical improvement action plans in individual fisheries and fish-farming regions. Key corporate partners include McDonald's, Wal-Mart, and international seafood suppliers and producers worldwide. Cannon was voted IntraFish Person of the Year 2009. He served

on the MSC's Technical Advisory Board from 2005 to 2008, worked at Conservation International from 1997 to 2006, edited the FAO World Review of Marine Fisheries in 1995/97, and studied environmental economics and fisheries at Imperial College London, and ecology at Cambridge University.



**Albert Cho** is Director of Strategy in Cisco Systems' Climate Change Innovation Group. Prior to joining Cisco, he was an engagement manager and climate change Strategy Fellow at McKinsey & Company, a global management consulting firm. He has worked with a wide range of industrial, aerospace/defense, and financial services firms on building new businesses in energy- and climate-related markets. He has also consulted to national governments and foundations on supporting ecosystem markets, and worked at the United Nations Development Program on strategies to achieve the Millennium Development Goals. Areas of particular interest include smart grid, solar energy, carbon

markets, and tropical forestry. Albert received an M.B.A and an M.Sc. in development economics from Oxford University, where he was a Rhodes Scholar. He holds an A.B. summa cum laude and Phi Beta Kappa from Harvard College.



**Daniel Cohen** is a principal and President of Fishermen's Energy, a fishermen owned offshore wind development company which has proposed to build two offshore wind farms off of New Jersey. A goal of Fishermen's Energy is to organize the fishing industry from Maine to South Carolina to develop offshore energy resources. Daniel is also a principal and President of Atlantic Capes Fisheries, Inc. an East Coast vertically integrated fishing company operating over 20 fishing vessels with facilities in New Jersey, Rhode Island and Massachusetts. He is personally committed to building natural resources companies pairing the twin goals of sustainable renewable resources in a scientifically managed marine environment with an economically sustainable fishing industry. To

fulfill this commitment Daniel has spent one third of his time, outside the company, in public roles, such as Chairman of the NFI-Scientific Monitoring Committee and the NFI-Clam Committee. Daniel was recognized for this environmental leadership role by being awarded the "FINese Award for Responsible Fisheries" by the National Fisheries Institute, the largest association of seafood harvesters, processors, marketers and importers in the United States. In 2009 Daniel Cohen was recognized for his environmental leadership by the New Jersey Board of Public Utilities when he was named New Jersey's "Clean Energy Advocate of the Year".



**Adam Cole** was appointed General Counsel of the California Department of Insurance in November 2007. Prior to that, Mr. Cole spent 17 years representing policyholders in California and throughout United States in coverage litigation. The two law firms he worked at, Heller Ehrman and Covington & Burling, were among the leading policyholder-side insurance coverage practices in the U.S. Mr. Cole taught insurance law at the University of California at Berkeley (Boalt Hall) and the University of California Hastings College of the Law. He served as a United States Peace Corps Volunteer in Swaziland, Africa, from 1983-1985. He also serves as a Board Member of the Anti-Defamation League (Central Pacific Region) to assist the civil rights organization in

combating discrimination and bigotry in the Bay Area. His educational experience includes: Yale University (B.A., Religious Studies, *magna cum laude*, 1983); Harvard Law School (J.D., *cum laude* 1989). Mr. Cole was a law clerk for the Honorable John M. Steadman of the District Columbia Court of Appeals in 1989-1990.



**Larry Collins** is 52 years old and has been a commercial fisherman since 1985. Larry lives in San Francisco and his boat is berthed at Fisherman's Wharf. He is the President of the Crab Boat Owners Association of San Francisco, which is the oldest fisherman's association on the West Coast, and is also Vice-President of the Pacific Coast Federation of Fisherman's Associations whose members include associations from Santa Barbara, CA to Washington State. He sits on the Board of the California Salmon Council and is an elected member of the California Dungeness Crab Task Force. Larry teaches in the, "Fisherman in the Classroom", program in conjunction with

the Gulf of the Farallones National Marine Sanctuary. He is also a founding member of Salmon Water Now, a collaboration between fishermen and media professionals organized to educate the public about the complex story of water policy in California.



**Eli Enns**, BA JSC, is a political scientist who specializes in Canadian Constitutional Law, International Dispute Resolution, and Comprehensive Land Claims in British Columbia. Over the past five years Eli has worked in Clayoquot Sound on the west coast of Vancouver Island on a variety of projects ranging from civil construction developments to Restorative Justice initiatives. He is currently leading the Tla-o-qui-aht Nation Building Program, furthering the Tribal Parks initiative and working with domestic and international partners in the Canada Africa Learning Alliance: poverty reduction and the protection of biodiversity. Eli was the first Tla-o-qui-aht representative on the Board

Of Directors of the UNESCO Clayoquot Biosphere Trust, and presently serves on the Board Of Directors for several organizations both locally and nationally including: The Tonquin Foundation, the Tla-o-qui-aht Economic Development Corporation, The Indigenous Cooperative on the Environment and the Tinwis Best Western Resort in Tofino.



**Marea Hatziolos** is a marine ecologist and a senior coastal and marine specialist in the Environment Department of the World Bank. She is the team leader for the Coastal and Water Team in the Environment Department and leads the Bank's work on Integrated Coastal Management and marine biodiversity conservation. She oversees a global partnership to support science-based management of coral reefs in four Bank regions and is the Bank's representative to the International Coral Reef Initiative (ICRI). Dr. Hatziolos received her undergraduate degree in Biology from Wellesley College, where she is also on the faculty of the newly established Madeleine K. Albright Institute for Global Affairs. She earned her PhD in Zoology from the University of California at

Berkeley and did postdoctoral work at Yale University and at the Instituto Tecnológico y de Estudios Superiores de Monterrey in Mexico. She has lived and worked extensively in West Africa, South Asia, Eastern Europe, Latin America and the Caribbean.



**Indumathie Hewawasam** is a Marine Policy Specialist, currently working as a Project Preparation Advisor to the Government of Kenya for the Coastal Development Project. She is also a Consultant to the World Bank under the Tanzania Marine and Coastal Environmental Management Project (MACEMP). She spent over 20 years at the World Bank, working on a range of initiatives from environmental policy and management, community development, forestry, environment and mining, protected areas to integrated coastal zone management, marine protected areas, offshore and nearshore fisheries and sustainable financing for marine protected areas. Dr. Hewawasam also worked for The Nature Conservancy as a Senior Policy Advisor on the

Coral Triangle Initiative. She has a B.A. in History, an LL.B with a focus on International Law from Sri Lanka; an M.A. with a specialization on International Development and Environmental Management (US), and a PhD in Marine Policy with a focus on Integrated Coastal Management and Marine Protected Areas (US).



**Paul Holthus** is founding Executive Director of the World Ocean Council which brings together the international ocean business community to catalyze leadership and collaboration in addressing marine environmental issues in support of improved industry operations. Paul works with the private sector and market forces to develop practical solutions for achieving sustainable development and addressing marine environmental issues. He has worked on projects in over 30 countries in Asia, the Pacific, Central America, Europe and Africa. As a consultant on sustainable development, Paul works with companies, industry associations, UN agencies, international NGOs and foundations, especially in the areas of oil and gas, fisheries, aquaculture, standards and certification. Past positions include: Founding Executive Director of the Marine Aquarium Council; Deputy Director for the IUCN Global Marine and Coastal Program; Senior Officer of The Nature Conservancy Asia-Pacific Program; and Senior Program Officer of the UNEP South Pacific Regional Environment Programme (SPREP).



**Michael Jenkins** is President of Forest Trends. From 1989-1999, he was the Associate Director for the Global Security and Sustainability Program of the MacArthur Foundation. Michael's responsibilities with the Program included all grant-making in Latin America and the Caribbean, as well as overarching program management. In 1998, Michael was in a joint appointment as a Senior Forestry Advisor to the World Bank. Before entering the MacArthur Foundation, he worked for three years as an agroforester in Haiti with the USAID Agroforestry Outreach Program. Previous to that, he worked with a Washington-based development organization, Appropriate Technology International, as a technical advisor. In the late 1970s, Michael was a Peace Corps volunteer in Paraguay working in agriculture, apiculture, and forestry projects. He has traveled and worked throughout Latin America, Asia and parts of Africa, and speaks Spanish, French, Portuguese, Creole and Guaraní. Michael has contributed to a number of books and articles, and with Island Press published "The Business of Sustainable Forestry: Strategies for an Industry in Transition". He holds a Master's of Forest Science from Yale University.



**Seth Kaplan** is the Vice President for Climate Advocacy at the Conservation Law Foundation, serving as the Director of CLF's regional Clean Energy and Climate Change Program and overseeing all work at CLF involving global warming and greenhouse gas emissions. A graduate of Wesleyan University and Northeastern University School of Law he worked as a real estate and environmental attorney in private practice in New York City. His current work focuses on fostering renewable energy, working for climate protection and reducing the environmental impact of fossil fuel power plants and pressing for expanded opportunities for meeting energy needs through energy efficiency. This work has included FERC litigation and extensive participation in ISO New England and New England Power Pool processes. In particular he has been deeply involved in the multi-state and stakeholder process that shaped the Regional Greenhouse Gas Initiative and the ISO New England process defining a new "Forward Capacity Market."



**Richard Kenchington** is currently working for UNEP on the implementation of a new Coastal and Marine Ecosystems Programme. As a marine ecologist, he was a foundation member of the Great Barrier Reef Marine Park Authority (GBRMPA) in 1978. Until 1990, he was Director of planning during the declaration and initial planning of the Marine Park, retiring in 1999 as Executive Director of the Authority. Between 1990 and 1992 he was Secretary of an Australian national Coastal Zone Inquiry. Richard has published on management of coral reef and tropical coastal ecosystems, and more generally of coastal and marine ecosystems. He has worked widely as a consultant and advisor to government and international agencies and as a Professorial Fellow of the Australian National Centre for Ocean Resources and Security of the University of Wollongong, Australia.



**Judy Kildow** directs the National Ocean Economics Program (NOEP), is adjunct professor at California State University at Monterey Bay, serves on several boards, and is a private consultant. Her field bridges science and policy, identifying how economic activities and ocean changes affect each other. She spent 25+ years at MIT, tenured in the Department of Ocean Engineering, was Senior Social Scientist at the Monterey Bay Aquarium Research Institute, James W. Rote Distinguished Professor, California State University Monterey Bay, Research Faculty/Senior Fellow at Harvard University, University of Southern California and University of Vermont. Dr. Kildow has a Ph.D. in International Relations and Science Policy from The Fletcher School of Law and Diplomacy, Tufts University. She currently resides in the foothills of the Sierras with her husband Alfred and dog Lily, where she is experiencing the extraordinary water bounty of this season's El Nino.



**Winnie Lau** is the Program Manager for the Marine Ecosystem Services (MARES) Program. Prior to joining the MARES Program, she worked at the U.S. Department of State as an American Association for the Advancement of Science (AAAS) Diplomacy Fellow – in the Office of the Science and Technology Adviser to the Secretary, Office of Oceans Affairs, and Office of Multilateral Trade Affairs, covering issues such as U.S.-Japan bilateral science and technology cooperation, international policies on marine biodiversity, marine protected areas, coral reefs and climate change, and accessions to the World Trade Organization. Winnie received her M.S. and Ph.D. in Oceanography and graduate certificates in Environmental Management and Technical Japanese from the University of Washington and her B.A. in Environmental Sciences and Integrative Biology from the University of California, Berkeley.



**Amber Mace** serves as the Executive Director of the Ocean Protection Council (OPC) and Assistant Secretary for Coastal Matters. She served as the Executive Director for the California Ocean Science Trust (OST) and the Science Advisor to the OPC from 2006 to 2009. Prior to leading the Ocean Science Trust, Mace worked as a National Sea Grant John A. Knauss marine policy fellow for the U.S. Senate's Committee on Commerce, Science, and Transportation in 2006, and as a California Sea Grant state fellow at the Ocean Resources Management Program in the California Natural Resources Agency in 2005. Mace earned a Bachelor of Arts in geography from University of California, Berkeley in 1994 and a Doctorate in ecology from University of California, Davis and the Bodega Marine Laboratory in 2005. Mace has spent her life along the shores of California and is working actively to improve communication and collaboration among scientists, resource managers, policy makers, and the public.



**Rick MacPherson** is currently the Director of Conservation Programs at Coral Reef Alliance. Since 1986, MacPherson has worked worldwide in site-based marine conservation biology, ocean science education, and on creating learning networks and evaluation strategies to support ocean conservation. Recent projects have established leadership networks in support of community-based conservation; explored the role of marine tourism in conservation; implemented business planning and sustainable financing strategies for MPAs; and realized community benefits and alternative livelihoods derived from conservation partnerships. MacPherson has led ecotourism expeditions to coral reef systems around the Pacific Rim and throughout the Caribbean basin and has conducted fieldwork in California, Florida, Hawaii, Jamaica, Mexico, Belize, Honduras, Ecuador, Palau, Fiji, Papua New Guinea, Indonesia, and Australia's Great Barrier Reef. He holds a dual M.S in evolutionary biology and in the history and philosophy of science from Harvard University and a B.S. in marine biology from Roger Williams University in Rhode Island.



**Bonnie McCay** is Board of Governors Distinguished Service Professor at Rutgers University, New Brunswick, where she chairs the Department of Human Ecology. Her graduate training was in anthropology at Columbia University (PhD 1976), and her research and teaching have focused on challenges and policies for managing marine resources, particularly fisheries. She has done field research in Newfoundland and Nova Scotia, Canada, in New Jersey, and in Baja California, Mexico, with funding from the National Science Foundation, the New Jersey Sea Grant College Program, and the New Jersey Agricultural Experiment Station. Her books include "The Question of the Commons," "Oyster Wars and the Public Trust," and "Enclosing the Commons." She currently serves on the Scientific and Statistical Committee for the Mid-Atlantic Fisheries Management Council and heads the Resource Policy Committee of the American Fisheries Society.



**Steven J. McCormick** is the president and a trustee of the Gordon and Betty Moore Foundation. In 1976 he joined The Nature Conservancy as its Western Regional Legal Counsel, and later spent 16 years as executive director of the California state program. From 2001-2007, he was TNC's president and CEO, where he was responsible for a budget of \$500 million, and a staff of over 3,000. From 2000-2001 he was a partner at Resources Law Group. Steve has a B.S. from the University of California at Berkeley, and a J.D. from the University of California, Hastings College of Law.



**Andreas Merkl** is the Director of Global Initiatives for ClimateWorks Foundation. From 1997 through 2007, he was a principal at California Environmental Associates, a San Francisco-based consultancy. From 1989 through 1995, Mr. Merkl worked with McKinsey and Company, where he co-founded the North American Environmental Practice. Mr. Merkl is also the Chairman of SeaChange Capital, a San Francisco-based venture capital fund. Mr. Merkl has also worked in senior position with CH2MHILL, and as founding director of the Conservation and Community Investment Fund. He holds graduate degrees from Harvard University and UC Berkeley in Business Administration and Natural Resource Analysis, respectively.



**Stephanie Moura** is the Director of the Massachusetts Ocean Partnership (MOP), an independent, broadly representative public-private partnership supporting development and implementation of integrated ocean management for Massachusetts' coastal oceans. MOP's work includes serving as stakeholder forum for collaborative problem solving on difficult ocean management issues and facilitating synthesis and development of processes, data and tools to improve the integration of natural and social science with management. For nearly 20 years Stephanie has worked on marine and coastal resource policy/management issues and has developed complementary experience in managing multi-stakeholder processes. From 1998 to 2006, she managed large combined sewer overflow (CSO) projects, and the

associated public involvement programs, for the Massachusetts Water Resources Authority in accordance with responsibilities under the Clean Water Act to minimize sewage discharges to the Boston Harbor watershed. She earned her B.A. in Marine Biology/Environmental Policy in 1984 from University of California, Santa Cruz and her M.A. in Urban and Environmental Policy in 1990 from Tufts University.



**Peter Mumby** is a Professor of coral reef ecology and conservation at the University of Exeter (UK). He obtained in PhD in 1997 and his research aims to provide practical solutions to conservation problems and provide accurate rationale for conservation action (e.g., value of mangroves as fish nurseries, impacts of marine reserves, measuring resilience of ecosystems). From April he will take up an Australian Research Council Laureate Fellowship at the University of Queensland. Peter is a Pew Fellow in Marine Conservation.



**Carlos Muñoz Piña** is currently the director of Environmental Economics and Public Policy Research at the Instituto Nacional de Ecología (INE), the research agency of the Mexican Ministry of Natural Resources and the Environment. At INE, the research team he leads has prepared several initiatives on environmental taxes and other economic instruments for environmental policy. He has also worked as an economist for the government of Mexico, the World Bank, the London Environmental Economics Centre, with internships at the North American Commission for Environmental Cooperation in Montreal and the Resources Renewal Institute in San Francisco. Carlos has published papers on topics related to the economics of rural migration, environmental taxes, common property resources, poverty and the environment, economic valuation of ecosystems, water economics and policy and the payment of environmental services. He is an economist graduated from the Instituto Tecnológico Autónomo de México (ITAM) in Mexico City, with an MSc. in Environmental Economics at University College London, and a Ph.D. in Agricultural and Resource Economics at the University of California at Berkeley.



**Nyawira Muthiga** has devoted her career to the management and conservation of marine and coastal ecosystems in the Western Indian Ocean (WIO). She is the Director of the Kenya Marine Program for the Wildlife Conservation Society (WCS) and coordinates research and conservation programs in the WIO. Her research interests lie in the field of biology and ecology of coral reefs especially research that addresses challenges for management and livelihoods. Nyawira participates in a wide variety of national, regional and global marine and coastal initiatives including the Coral Reef Task Force of the Nairobi Convention, the International Coral Reef Initiative, WCPA-marine and served as the President of the Western Indian Ocean Marine Science Association (WIOMSA) from 2001 to 2009.



**Odigha Odigha** is the Chairman of the Cross River State Forestry Commission, Nigeria. In 2003, Odigha was awarded the Goldman Environmental Prize for Africa. His interest are concentrated on the protection of the last Mangrove Forest in Nigeria, where he currently is working on the use of Fuel Efficient Wood Stoves for mangrove protection.



**Joe Plesha** has worked at Trident Seafoods Corporation for 23 years, formerly as General Counsel and since 2009 as Chief Legal Officer. Prior to his employment at Trident, he was counsel to the U.S. Senate Commerce Committee, with responsibility for ocean policy and fisheries issues. Joe was born and raised in Seattle, Washington. He is widowed with three sons; the oldest two currently attend the University of Washington and the youngest is at Shorecrest High School in Shoreline.



**Robert Repetto** is Senior Fellow at the United Nations Foundation's climate and energy program. He is also Senior Fellow at Clean Air-Cool Planet, a Washington DC NGO, and an advisor to Trucost PLC, a London-based investment research firm. Until June, 2008, he was Professor in the Practice of Economics & Sustainable Development at the Yale University School of Forestry and Environmental Studies. Previously, he was a Senior Fellow of the Tim Wirth Chair at the University of Colorado, and an advisor to Stratus Environmental Consulting, in Boulder, Colorado. He was a Pew Fellow at the Marine Policy Center of the Woods Hole Oceanographic Institute, and for fifteen years was vice president of the World Resources Institute in Washington DC,. Earlier in his career, he was an Associate Professor in economics and public health at Harvard University, and before that an advisor on economic planning in Indonesia, Bangladesh and India.



**Sibylle Riedmiller** is a German-born Social Scientist, has spent all her professional life in Latin America and Africa, planning, managing and evaluating education reform and natural resource management programs with UNESCO, the German Aid Agency GTZ and other aid agencies. From 1991, she founded Chumbe Island Coral Park Ltd., which turned formerly uninhabited Chumbe Island in Zanzibar/Tanzania into a private marine park and forest reserve. A Visitors' Centre and eco-lodge built with state-of the-art eco-technology provide income for park management and environmental education programs for local schools. This has created one of the first private marine parks in the world that is now fully sustained with income from ecotourism. A passionate sailor and diver, Sibylle has lived in Tanga/Tanzania since 1982, where she now coordinates the Tanzanian Dynamite Fishing Monitoring Network formed by tourism operators, fish exporters, researchers and conservationists. The network records destructive fishing and campaigns for improved marine governance in Tanzania.



**Alejandro Robles** is currently the Executive Director and Co-founder of Noroeste Sustentable (NOS); an organization dedicated to advance sustainability in northwest Mexico. He works to build effective networks of collaboration among public, private, and civil stakeholders. With over 25 years of experience, Robles dedicate his efforts to foster shared vision, collective learning, and good governance in specific regions and relevant topics such as water, fisheries, coastal development, species and habitat conservation. Robles has a Bachelor's degree in Biochemistry from the ITESM, campus Guaymas, Sonora (1982). From 1997-98 Robles joined the LEAD Program in which he was able to approach conservation and development problems from a multicultural and multi-stakeholder perspective. He worked for the federal fisheries agency in Mexico (1984-88). The he join Conservation International as the Sea of Cortez program director (1988-1993), he became Director of CI Mexico Program (1993-2000) and then Vice-president for Mexico and Central America (2001-04).



**Rina Rosales** has spent most of her career life doing environmental economics related research in the Philippines. Her work involves developing economic instruments for biodiversity conservation both in the terrestrial and marine sectors. She was based in Sri Lanka in 2003-2004 as the Coordinator of the Asian Regional Environmental Economics Program of IUCN. Since then, she has been with a Philippine-based consulting firm called Resources, Environment and Economics Center for Studies, Inc. (REECS) and often partners with protected area management authorities, NGOs and government agencies in the natural resources management sector. Rina was part of an earlier study led by the International Institute for Environment and Development (IIED) that assessed the establishment of markets for environmental services in selected countries. Her more recent PES-related involvement includes planning for the Coral Triangle Initiative, consulting for the Sulu-Sulawesi Seascape, and membership in the Payments for Ecosystem Services-Technical Working Group in the Philippines.



**Lorenzo Rosenzweig** has twenty five years of experience in the environmental field. He has a B.S. degree in Biochemistry and Engineering from the Monterrey Technological Institute (ITESM) and a Master in Science degree in Marine Biology and Seafood Technology from Oregon State University. As President of the Mexican Fund for the Conservation of Nature (a US\$102 million endowment), he has acquired extensive experience in fundraising and execution of capital campaigns, and the operation and funding of biodiversity conservation, environmental research and capacity building projects. He has also contributed to the design and incorporation of learning and practice networks for the National Environmental Funds of Latin America and the Caribbean (RedLAC). He is member of several boards and advisory councils, including The Mexican Institute for Competitiveness (IMCO), Pronatura Noreste A.C., the Leadership and the Environment Program (LEAD) for Mexico, The Mesoamerican Reef Fund, the Mesoamerican Biological Corridor, The Fund for Communication and Environmental Education and the Lindblad Expeditions-National Geographic Conservation and Exploration Fund.



**Mary Ruckelshaus** leads the Ecosystem Science Program at NOAA Fisheries' Northwest Fisheries Science Center in Seattle, WA, USA. Dr. Ruckelshaus is a marine population biologist; and the main focus of her current work is on developing linked ecological-social models estimating the flow of ecosystem services under different management regimes and future climate conditions within the U.S. and in marine systems worldwide. She co-leads the Marine Initiative of The Natural Capital Project, serves as a member of The Nature Conservancy- Worldwide Board of Directors, and is a past chair of the Science Advisory Board of the National Center for Ecological Analysis and Synthesis (NCEAS). Before joining the National Marine Fisheries Service in 1997, Ruckelshaus was a faculty member in Biology at Florida State University. She has 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.



**Martha Isabel (Pati) Ruiz Corzo** is Federal Director of the Sierra Gorda Biosphere Reserve in Queretaro State of the National Commission of Natural Protected Areas in Mexico. She and her family have dedicated the last 26 years to raising a tidal wave of public interest and participation on a regional level, today mainstreaming the local, regional, national and international resources for bioregional sustainability. Beginning as a grassroots organization for reforestation and environmental education, today five local civil organizations collaborate with 35,000 citizens regionwide. The Sierra Gorda is a model of rural innovation, community education, civil participation and social entrepreneurship in developing an economy of local products such as ecotourism, foods and crafts, and environmental services including water capture, avoiding soil erosion, biodiversity conservation and forest carbon in hand with the methodology of holistic cattle management and soil carbon. Partners include the Global Environmental Facility, UNDP, Ashoka: Innovators for the Public: Social Entrepreneurs, the World Economic Forum, the Rolex Prize for Enterprise, and Forest Trends.



**Andrea Saenz-Arroyo** is a Mexican marine biologist with a PhD in Environmental Economics and Environmental Management. Andrea's attention has been caught by understanding the role of humans as intelligent predators in the planet's ecosystems with a long-term historical perspective. In 2000 she joined Comunidad y Biodiversidad A.C. (COBI), a Mexican non-profit organization dedicated to encouraging marine conservation through participatory approaches. Her duties as COBI's Research Director are mainly to design, apply and evaluate models for sustainable use with rural coastal communities of Mexico for application elsewhere. She has published some of her work in prestigious international journals, such as *Proceedings of the Royal Society Series-B, Fish and Fisheries*, Mexican newspapers and other magazines. As of 2006 she is

recognized as a researcher, level I within the Mexican National Research System. In 2007 she was appointed the position of visiting professor at the University of Arizona and Universidad Nacional Autónoma México (UNAM).



**Jim Sanchirico** is a Professor of Environmental Science and Policy, University of California, Davis and a Nonresident Fellow, Resources for the Future, Washington D.C. After working nine years in Washington D.C. as a Fellow and then a Senior Fellow with Resources for the Future, he returned to UC Davis as an Associate Professor in the Department of Environmental Science and Policy. He communicates his research in economic and natural science peer-reviewed journals. In addition to serving on NOAA's Science Advisory Board, he is a member of the Science and Technical Panel Expert Committee, U.N. Global Environmental Facility, the editorial councils at the Journal of Environmental Economics and Management, Ecology Letters, and the

Journal of Agricultural and Resource Economics and a past associate editor at Marine Resource Economics. He recently served on the National Research Council's committee to review the U.S. Ocean Research Priorities Plan. James received his Ph.D. in agricultural and resource economics from the University of California at Davis.



**Enrique Sanjurjo** is currently an economist for the WWF-Mexico Marine Program and is also an environmental economist from the Instituto Tecnológico Autónomo de México (ITAM), with graduate studies at the University de Valladolid (UVA), Spain. He has more than 12 years of professional experience on designing, evaluating and negotiating environmental public policies in Mexico. He worked on the Mexican Environmental Ministry (SEMARNAP) on the design of incentive based conservation tools as part of the Economic and Social Analysis Unit (1996 – 1997), as an advisor for the under-minister of planning (1997-1999) and for the under-minister of environmental promotion and regulation (2002-2004). He also worked for the

National Institute of Ecology at several projects including the economic valuation of coastal wetlands and the design of incentive based tools for wetland conservation and environmental flows maintenance (2004-2007). Since October 2007, he is working for WWF and he is focused on: sustainable fisheries, incentive based conservation tools and private conservation agreements for marine and coastal ecosystems.



**Astrid Scholz** is Vice President for Knowledge Systems at Ecotrust, a Portland, Oregon, based organization committed to creating economic opportunity, social equity and environmental well-being. Responsible for managing Ecotrust's consulting, analytical, technical and cartographic capacities, she oversees a staff of 15 and serves as principal investigator on a variety of projects that link social, economic and ecological systems. Astrid is an affiliate faculty member of Oregon State University. She serves on the boards of Habitat Media, Comunidad Y Biodiversidad (Mexico), and the Living Oceans Society (Canada), and as a member of the Master Plan Science Advisory Team to the Marine Life Protection Act Initiative in California. She holds an M.A. in Economics and Philosophy from the University of St. Andrews, an M.Sc. in Economics from the University of Bristol, and a Ph.D. in Energy and Resources from the University of California, Berkeley.



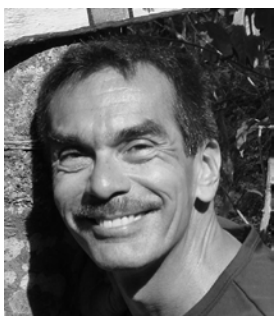
**Joerg Seifert-Granzin** is a senior economist specialized in spatiotemporal analysis and valuation of environmental services. He has more than 15 years of experience in economic research on developing countries. Currently, he is advising different activities reducing emissions from deforestation and forest degradation (REDD) of Forest Trends-Katoomba Group. Having been recruited as an integrated expert by the German Development Cooperation (GTZ), Mr. Seifert-Granzin coordinated the scientific and technical development of remote sensing, biomass measurement, and econometric modeling tools facilitating the implementation of national and subnational REDDs schemes in Bolivia and Cameroon. Apart, he supervised subnational adaptation activities in the Bolivian lowlands. As FAN Bolivia's Coordinator of Noel Kempff Mercado Climate Action Project he guided the certification process, revised the methodologies applied and edited the Project Design Document. Together with FAN's environmental services' team he conducted research on hydrological services and designed projects to conserve them.



**Linda Sheehan** is an attorney and Executive Director of the California Coastkeeper Alliance, a coalition of 12 Waterkeeper organizations spanning the California coast from the Oregon border to San Diego. Over the past 15 years, Ms. Sheehan has focused on protecting and enhancing the health of California's coastal and marine ecosystems, and implementing programs to ensure clean, abundant waters throughout the state. Under Ms. Sheehan's leadership, the California Coastkeeper Alliance and its member Waterkeepers have developed and posted the only statewide maps of California's polluted water bodies, restored giant kelp habitats in the Southern California Bight, and worked to establish a coast-wide network of marine protected areas. Ms. Sheehan holds a B.S. in chemical engineering from the Massachusetts Institute of Technology; an M.P.P. from the University of California, Berkeley's Goldman School of Public Policy, where she was a Berkeley Policy Fellow; and a J.D. from the University of California's Boalt Hall School of Law.



**Marc Stuart** co-founded EcoSecurities in 1997 and has 15 years experience of international business development in carbon markets across more than 30 countries. Marc is currently Director of New Business Development and also heads up the firms Government and Regulatory Affairs Group, providing the firms positions within the evolving policy and regulatory processes of the UN, EU, US and elsewhere. He sits on the Board of the International Emissions Trading Association (IETA) and is the Chair of IETA's Project Developers Working Group. Outside the compliance carbon market, he is on the Board of the Voluntary Carbon Standard Association and co-chairs the VCS's Forestry and Land-Use Projects working group. He was one of the founders of the US based Coalition for Emission Reduction Projects (USCERP) and sits on the Advisory Boards of REEX Capital Asia (formerly the Singapore Renewable Energy Exchange) and Ecosystem marketplace.com. He is a graduate of the University of Pennsylvania, the London School of Economics and the Claremont Graduate University.



**Dan Suman** is a Professor in Marine Policy at the Rosenstiel School of Marine and Atmospheric Science of the University of Miami (UM). His research and project areas focus on coastal management, governance of marine resources and space, and marine protected areas – particularly in Latin America. Suman has a Ph.D. in oceanography from Scripps Institution of Oceanography (University of California, San Diego), and a law degree from the University of California, Berkeley. At UM, he teaches courses in Environmental Law, Coastal Management, Water Resources Policy, and Environmental Planning.



**Tina Taylor** is Director of Business Development in the Environment Sector at the Electric Power Research Institute (EPRI). She is responsible for partnerships, initiatives and services that add value to and extend the reach of EPRI's research. Taylor is currently leading work in the areas of climate change, fish protection, water availability and sustainability. Taylor has worked in the electric power industry for 20 years and joined EPRI in 1997. She led the Engineering and Environment Services group at EPRI Solutions since its inception in 2001. Prior to joining EPRI Solutions she was a project manager in the Nuclear Sector of EPRI where she was responsible for the development and delivery of a real-time plant monitoring and diagnostic system. Previously, Taylor specialized in chemistry and corrosion work for nuclear plants, working as a senior engineer at B&W Nuclear Technologies and before that as an engineer at Northeast Utilities. Taylor holds a Bachelor of Science degree in chemical engineering from Tufts University.



**Huynh Thi Mai** is a Senior Expert on Environmental and Biodiversity Policy at the Department of Natural Resources and Biodiversity Management - National Institute of Natural Resources and Environment – MONRE in Vietnam. Her main task is researching, advising, and proposing to develop laws, strategies, policies, plans, economic tools on environmental, and biodiversity issues, namely: Taking a lead of the implementation projects/themes on access to genetic resources and benefit sharing; biodiversity conservation planning and biodiversity conservation corridors establishment and management; and reporting on an overview of payments for ecosystem services in the world and Vietnam. From 2003-2008, Ms. Mai worked for MONRE's Department of Environment where she worked on guidance of Conservation and Sustainable Development of Wetlands in Vietnam, Biodiversity Law, the Government Decree on Compensation for Environmental Damage, Environmental Protection Law; and the Core Environmental Program and Biodiversity Conservation Corridors Initiative (BCI). She also participated in the study visit on Payments for Environmental Services in the US. She holds a Bachelor of Biology and Master of Policy in Science and Technology.



**Walter Vergara** is Lead Engineer in the Environmentally and Socially Sustainable Development Department (LCSES) of the World Bank's Latin America and Caribbean Regional Office. He also leads the Global Expert Team on Adaptation to Climate Change. Mr. Vergara works in several aspects of the climate change program and has participated in development of the carbon finance portfolio as well as initiatives on adaptation to climate change, transport and climate change, air quality, application of the Clean Development Mechanism (CDM) to wastewater, solid waste management and renewable energy. Mr. Vergara currently manages an extensive portfolio of climate initiatives in the region and has written extensively on the subject. He is a chemical engineer and graduate of Cornell University in Ithaca, New York, and the Universidad Nacional de Colombia in Bogota.



**Jose Villalon** is the managing director of the World Wildlife Fund-US Aquaculture Program. His primary role is to oversee eight multi-stakeholder roundtables, collectively called the Aquaculture Dialogues, which are creating global standards that will help address the environmental and social impacts associated with aquaculture. Villalon is a 27-year veteran of the aquaculture industry. During his career he has operated a Mexico-based consulting firm that worked with private industry on technical shrimp production protocols and farm accounting systems; managed a shrimp farm in Mexico; overseen new product development and market penetration in Europe and Japan for AquaNova, the wholly-owned subsidiary of Desc; and been in charge of Marine Harvest International's shrimp hatchery, feed mill, and farm operations in Guayaquil, Ecuador. Villalon holds a Master of Science degree in fisheries biology from the University of Washington in Seattle and a bachelor of science degree in biological sciences from Florida International University.



**Bettina von Hagen** is CEO of Ecotrust Forest Management, a forestland investment management and advisory company created by nonprofit Ecotrust. The company purchases and manages forestland in the region to build long-term value for investors while improving the environmental and social outcomes of forestry. Bettina previously served as Vice President at Ecotrust for the Natural Capital Fund, a \$50 million working endowment that develops and invests in triple-bottom line initiatives including Shorebank Pacific Corporation, an environmental banking company; the Natural Capital Center, a LEED-gold redeveloped warehouse; and the North Pacific Fisheries Trust, which helps community entities purchase quota shares in restricted fisheries. While at Ecotrust, Bettina initiated a new program in Ecosystem Services, focused on developing markets and supportive policies for carbon storage, water quality and biodiversity. Bettina holds an MBA from the University of Chicago and a BA in Biology and History from the University of the Pacific. Bettina currently serves on the boards of the Climate Trust, Forest Trends, Ecotrust Forest Management, and the Voluntary Carbon Standards Association.