

Appendix I - Biographical Sketches of NAST Members



Jerry M. Melillo (co-chair)

Dr. Jerry M. Melillo (B.A. Wesleyan University, CT; Ph.D. Yale University) is in his twenty-fifth year as a research scientist at The Ecosystems Center of the Marine Biological Laboratory in Woods Hole, Massachusetts, and currently serves as the Center's Co-Director. Dr. Melillo's research on biogeochemistry includes work on global change, the ecological consequences of tropical deforestation, and sustainable management of forest ecosystems. He was a convening lead author on the 1990 and 1995 IPCC assessments of climate change. He has served as a vice-chair of the International Geosphere-Biosphere Programme (IGBP) and is currently President of ICSU's Scientific Committee on Problems of the Environment (SCOPE). Dr. Melillo founded the Marine Biological Laboratory's Semester in Environmental Science, an education program for undergraduates from small liberal arts colleges and universities in which students spend a term learning and doing environmental science in Woods Hole. Dr. Melillo also has a strong interest in science policy. He served as the Associate Director for Environment at the Office of Science and Technology Policy in the Executive Office of the President for 15 months in 1996 and 1997.



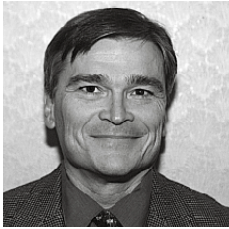
Anthony C. Janetos (co-chair)

Anthony C. Janetos is Sr. Vice President for Program at the World Resources Institute, an independent policy research institute located in Washington, DC. He has held this position since 1999. He is an ecologist by training, with an A.B. in biology from Harvard, and M.A. and Ph.D. in biology from Princeton University. Dr. Janetos' expertise is in the interaction of ecosystems and atmospheric change. He has been a participant, lead author, and editor of many international scientific assessments, including chapters in IPCC Working Group I, the recent IPCC Special Report on Land-Use Change and Forestry, and the UNEP Global Biodiversity Assessment. He is the author or co-author of publications on the use of remote sensing to understand terrestrial ecosystems, the importance of biological diversity for ecosystem functioning, and the synergies among global environmental issues. Before coming to the World Resources Institute, Dr. Janetos managed research programs on the consequences of land-cover change for the National Aeronautics and Space Administration in its Office of Earth Science.



Thomas R. Karl (co-chair)

Thomas R. Karl is the Director of the National Oceanic and Atmospheric Administration's (NOAA) National Climatic Data Center within NOAA's National Environmental Satellite and Data Information Service (NESDIS). He also manages NOAA's Climate Change Data and Detection Program Element for NOAA's Office of Global Programs. He holds a Masters Degree in Meteorology from the University of Wisconsin. Mr. Karl is a fellow of the American Meteorological Society and the American Geophysical Union. He served as Chair (1997-1999) of the National Academy of Sciences Climate Research Committee. Mr. Karl has received numerous awards for his scholarly work on climate, including the Helmut Landsberg Award, the Climate Institute's Outstanding Scientific Achievements Award, and is a two-time recipient of the Department of Commerce's Gold Medal and recipient of their Bronze Medal, and the NOAA Administrator's Award. He currently is co-chair of NOAA's Decadal-to-Centennial Strategic Planning Team. He is also the Editor of the Journal of Climate and an Associate Editor of Climate Change. He has been a lead author on each of the IPCC's assessments of climate change since 1990. His special interests in areas of Earth Science Information include building homogenous data sets and providing stewardship for large data archives. Mr. Karl has authored nearly 100 peer-reviewed journal articles, been co-author or co-editor on numerous texts, and has published over 200 technical reports and atlases.



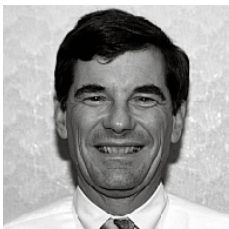
Eric J. Barron

Eric Barron is the Director of the Environment Institute in the Earth and Mineral Sciences college at Pennsylvania State University, where he is also Distinguished Professor of Geosciences. His areas of specialization include global change, numerical models of the climate system, and study of climate change throughout Earth history. He is also currently chair of the Board on Atmospheric Sciences and Climate of the National Research Council (NRC) as well as a member of the NRC committees on Global Change Research and Grand Challenges in the Environment. Dr. Barron received his bachelor's degree in Geology from Florida State University in 1973. He then began study of oceanography and climate at the Rosenstiel School of Marine and Atmospheric Sciences at the University of Miami, receiving his master's degree in 1976 and his Ph.D. in 1980. His career in climate modeling was initiated with a supercomputing fellowship at the National Center for Atmospheric Research (NCAR) in Boulder, Colorado in 1976. In 1980 he accepted a postdoctoral fellowship at NCAR, and in 1981 he joined the staff of the Climate Section. Dr. Barron returned to the University of Miami as an Associate Professor in 1985. In 1986 he became a member of the faculty of Pennsylvania State University, serving as Director of the Earth System Science Center and an Associate Professor of Geosciences.



Virginia Rose Burkett

Virginia Burkett is chief of the Forest Ecology Branch at the National Wetlands Research Center of the US Geological Survey (USGS), US Department of Interior, where she has worked since 1990. She also serves as an Associate Regional Chief Biologist for the USGS Central Region. Dr. Burkett supervises a team of wetland ecologists, forest scientists and landscape modelers who conduct research related to the ecology, management and restoration of forested wetlands. Her expertise includes wetland forest ecology and restoration, coastal wetland ecology, coastal management, and wildlife and fisheries management. Her current research involves bottomland hardwood regeneration in frequently flooded sites of the Mississippi River floodplain. Previously, Dr. Burkett served as director of the Louisiana Department of Wildlife and Fisheries, director of the Louisiana Coastal Zone Management program, and Assistant Director of the Louisiana Geological Survey. She received a B.S. in zoology and a M.S. in botany from Northwestern State University of Louisiana; her doctoral work in forestry was completed at Stephen F. Austin State University. Dr. Burkett is presently serving as a lead author of the chapter on global climate change and its impacts on coastal and marine ecosystems of the Third Assessment Report of the Intergovernmental Panel on Climate Change (IPCC).



Thomas F. Cecich

Thomas F. Cecich is Vice President of Environmental Safety for Glaxo Wellcome, where he has been employed for 15 years. In that capacity he is responsible for environmental protection and compliance, occupational safety and health, and emergency preparedness and response for this large multinational pharmaceutical company. Previously he held environmental and safety management positions at both the IBM and Allied Chemical corporations. Mr. Cecich has served as a faculty member in the Industrial Extension Service in the School of Engineering at North Carolina State University and an adjunct faculty member in the Department of Industrial Engineering. Mr. Cecich holds a B.S. in Industrial Engineering from the University of Miami and an M.S. in Industrial Engineering from North Carolina State University. He is certified in the practice of safety and industrial hygiene by the Board of Certified Safety Professionals and the American Board of Industrial Hygiene. He served on the Board of Certified Safety Professionals from 1993-1998 and was the President of the organization in 1997. He is the current Chairman of the Board of the Manufacturers and Chemical Industry Council of North Carolina, a state affiliate of the Chemical Manufacturers Association.

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Robert W. Corell (from January 2000)

Robert Corell is Senior Fellow at the Atmospheric Policy Program of the American Meteorological Society and Senior Research Fellow in the Belfer Center for Science and International Affairs of the Kennedy School of Government at Harvard University. Prior to these appointments in January 2000, he was Assistant Director for Geosciences at the National Science Foundation, where for over twelve years he had oversight for the Atmospheric, Earth, and Ocean Sciences and the Global Change programs of the National Science Foundation (NSF). While at the NSF, Dr. Corell also served as the Chair of the National Science and Technology Council's committee that has oversight of the US Global Change Research Program. Further, he served as chair and principal US delegate to many international bodies with interests in and responsibilities for climate and global change research programs. Dr. Corell is currently actively engaged in research concerned with both with the sciences of global change and with the interface between science and public policy. He currently serves as the Chair of the steering committee for the Arctic Climate Impact Assessment, which is an international assessment of the impacts of climate variability, change, and ultraviolet radiation increases in the Arctic region. Prior to joining the NSF in 1987, Dr. Corell was a Professor and academic administrator at the University of New Hampshire. Dr. Corell is an oceanographer and engineer by background and training, having received his Ph.D., M.S. and B.S. degrees at the Case Institute of Technology and MIT and having held appointments at the Woods Hole Institution of Oceanography, the Scripps Institution of Oceanography, and the University of Washington.



Katharine L. Jacobs

Katharine Jacobs has been the Director of the Tucson Active Management Area of the Arizona Department of Water Resources since 1988. Her expertise is in groundwater management and developing practical, appropriate solutions to difficult public policy issues. She has worked in many capacities for the Department of Water Resources since 1981, verifying groundwater rights, developing mandatory conservation and enforcement programs, writing statewide rules requiring the use of renewable water supplies in new subdivisions, and working within the Tucson community building consensus solutions to serious water policy conflicts. She has facilitated development of groundwater recharge facilities and regional recharge policy. Ms. Jacobs has a bachelor's degree in biology from Middlebury College in Vermont, and a master's degree in environmental planning from the University of California, Berkeley. She participated in a National Research Council panel that authored the book *Valuing Groundwater* and has authored a number of publications on water management-related subjects.



Linda A. Joyce

Linda Joyce is Research Project Leader with the USDA Forest Service Rocky Mountain Research Station. She supervises a team of scientists who conduct research on the impact of terrestrial and atmospheric disturbances on alpine and forest ecosystems. She is also an affiliate faculty member in the Graduate Degree Program in Ecology and in the Rangeland Ecosystem Sciences Department, both programs at Colorado State University. Her research interests include modeling vegetation and ecosystem dynamics to assess the impact of climate change on ecosystem structure and function, quantifying the impacts of management on natural resources, linking ecological and economic analyses, and spatially optimizing natural resource production. Dr. Joyce serves as the Climate Change Specialist for the USDA Forest Service. She has contributed to the forestry and rangeland sections of the Intergovernmental Panel on Climate Change assessments. She received a bachelor's degree in mathematics from Grand Valley State University, a Master's in Environmental Science from Miami University of Ohio, and a Ph.D. in range ecology from Colorado State University.



Barbara Miller

Dr. Miller is a Senior Water Resources Specialist in the World Bank's Africa Region, focusing on water resources management and international rivers in sub-Saharan Africa. She serves as a core member of the Nile Basin Initiative (NBI) Team, which is providing support to the ten countries that share the Nile River in the sustainable development and management of Nile water resources. Prior to joining the World Bank, Dr. Miller was President and Co-founder of Rankin International, a consulting firm providing engineering expertise in the areas of water, energy, the environment, and climate change. Previously, Dr. Miller spent ten years with the Tennessee Valley Authority (TVA). As Manager of the Flood Risk Reduction Department she was responsible for reducing flood damage potential in the Tennessee River Basin. While serving as a Senior Engineer at TVA's Engineering Laboratory, Dr. Miller managed the Reservoir System Analysis Group and was responsible for reservoir system modeling to support multipurpose reservoir system and hydropower operations. While at TVA, she also directed TVA's hydrologic modeling and climate change impact assessments. Dr. Miller has served on the advisory boards of several national climate change studies. Prior to TVA, Dr. Miller worked with the Illinois State Water Survey, Tippetts-Abbett-McCarthy-Stratton Engineers and Architects, and the US Environmental Protection Agency. Dr. Miller received her Ph.D. in Civil Engineering from the University of Illinois, Urbana-Champaign, and M.S. from the University of Wisconsin, Madison. She is a licensed Professional Engineer.



M. Granger Morgan

M. Granger Morgan is Head and Professor of Engineering and Public Policy at Carnegie Mellon University, where he also holds the Lord Chair Professor in Engineering as well as academic appointments in both the Department of Electrical and Computer Engineering and in The H. John Heinz III School of Public Policy and Management. He holds a B.A. from Harvard, where he concentrated in Physics, an M.S. in Astronomy and Space Science from Cornell, and Ph.D. from the Department of Applied Physics and Information Sciences at the University of California at San Diego. Much of Professor Morgan's recent research has focused on the integrated assessment of large complex policy problems that involve science and technology; in the treatment of uncertainty in quantitative policy analysis; in risk analysis, management and communication; and in several applied areas of technology and public policy. In collaboration with Hadi Dowlatabadi, he is active in Carnegie Mellon's Center for Integrated Study of the Human Dimensions of Global Change where his work includes better characterization of important uncertainties, and development of better policies to promote basic technology research in support of clean energy technology. Professor Morgan is a Fellow of the Institute of Electrical and Electronics Engineers, the American Association for the Advancement of Science, and the Society for Risk Analysis.

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Edward A. Parson (through January 2000)

Edward A. Parson is Associate Professor of Public Policy at Harvard's John F. Kennedy School of Government, where he has been on the Faculty since 1992. He is also a Faculty Research Associate in the Belfer Center for Science and International Affairs. Dr. Parson's research interests include the two related fields of environmental policy and negotiations. His environmental research stresses its international dimensions, including policy coordination, international institutions, negotiation, and conflict resolution. His book on the development of international cooperation to protect the ozone layer will appear in 2001. Current projects include work on scientific assessment in international policy-making; policy implications of carbon-cycle management; design of international market-based policy instruments; and development of policy exercises, simulation-gaming, and related novel methods for assessment and policy analysis. In negotiations, Parson's interests include the use of models and expert assessment bodies to support negotiations, learning and bargaining under uncertainty, and analysis of multi-party negotiations. He has developed a series of simulated multi-party negotiation exercises that are used for policy research and executive training in ten countries. Dr. Parson has served on the National Research Council Committee on Human Dimensions of Global Change. He holds degrees in Physics from the University of Toronto and Management Science from the University of British Columbia, and a Ph.D. in Public Policy from Harvard. He has worked and consulted for the White House Office of Science and Technology Policy, the US Congress Office of Technology Assessment, the US Environmental Protection Agency, Environment Canada, the Canadian Privy Council Office, the International Institute for Applied Systems Analysis, the Commission of the European Communities, and the UN Environment Programme.



Richard G. Richels

Richard Richels directs Global Climate Change Research at EPRI (formerly the Electric Power Research Institute) in Palo Alto, California. In previous assignments, he directed EPRI's energy analysis, environmental risk, and utility planning research activities. He has served on a number of national and international advisory panels, including committees of the Department of Energy, the Environmental Protection Agency, and the National Research Council. He has served as an expert witness at the Department of Energy's hearings on the National Energy Strategy and testified at Congressional hearings on priorities in global climate change research. He also served as a principal lead author for the Intergovernmental Panel on Climate Change's (IPCC) Second Assessment Report and is currently serving as a lead author for the IPCC's Third Assessment Report. He is a co-author with Alan Manne of *Buying Greenhouse Insurance - the Economic Costs of CO₂ Emission Limits*. Dr. Richels was awarded a M.S. degree in 1973 and Ph.D. degree in 1976 from Harvard University's Division of Applied Sciences. While at Harvard he was a member of the Energy and Environmental Policy Center.



David S. Schimel

David Schimel is Professor and Director in the Max-Planck-Institute for Biogeochemistry in Jena, Germany and a Senior Scientist at the National Center for Atmospheric Research in Boulder, Colorado. Previously, he has been a research scientist at Colorado State University in the College of Natural Resources and a National Research Council Senior Fellow at NASA-Ames Research Center. His scientific interests focus on the role of terrestrial ecosystems in the carbon cycle and on interactions between ecosystems and climate. He has served as Convening Lead Author of the IPCC for chapters on the Carbon Cycle and on impacts in North America. He has served on numerous committees and advisory panels including the National Research Council Committee on Global Change Research and interagency Carbon Cycle Science Plan Working Group. Dr. Schimel received a B.A. from Hampshire College in biology and applied mathematics, and Ph.D. from Colorado State University in Rangeland Ecosystem Science.