

**Invitation for Comments on "Short List" Candidates for a new Ecological Effects Subcommittee
of the EPA Advisory Council on Clean Air Compliance Analysis**

The EPA Science Advisory Board (SAB) Staff Office announced in 68 FR 53162-53164, September 9, 2003 that it was forming a new subcommittee of the Council to help provide advice to the Agency for characterizing ecological effects and requested nominations for potential subcommittee members. Background on the project and details on the panel nomination process appear in the above referenced Federal Register notice and are also available at the SAB website, (<http://www.epa.gov/sab>).

The SAB Staff Office has reviewed the 16 nominations for the subcommittee, and has narrowed the list of nominees to 11 candidates based on the qualifications and interest of the nominees. Brief biosketches of the candidates are listed below for comment. We hereby notify the public about these candidates and welcome information, analysis or documentation that the SAB Staff Office should consider in evaluating these experts to serve on the subcommittee. Individuals should send their comments to Dr. Angela Nugent, Designated Federal Officer for the Council, by January 27, 2004, via email to nugent.angela@epa.gov. Information provided will be carefully considered in selecting the subcommittee.

The SAB Staff Office Director, in consultation with the Chair of the Council, as appropriate, makes the final decision about who will serve on the subcommittee. The SAB Staff will complete its review of information regarding financial conflicts of interest, possible appearance of a lack of impartiality, and appropriate balance and breadth needed to address the charge. SAB Staff will review all the information provided by the candidates, any information that the public may provide in response to the posting of information about the prospective members on the SAB website, and information gathered independently by SAB Staff on the background of each candidate.

Boyer,Elizabeth

State University of New York

Dr. Elizabeth Boyer's undergraduate background in Geography (BS, Penn State, focusing on remote sensing and geographic information systems), graduate work in Environmental Sciences (MS & PhD, University of Virginia, focusing on hydrology), and post-doctoral work (Cornell University, Program in Biogeochemistry and Environmental Change) have all encouraged a multidisciplinary view of environmental problems. Her research goals involve characterizing how water and solutes are transported and transformed in the environment. She is interested in understanding how human activities (such as land use change, forest management, agricultural practices, & urbanization) and disturbances (such as droughts & floods) influence hydrological flow paths and water quality. Most of her work to date has focused on coupled hydrological and ecological processes controlling nutrient fluxes, and on sources and consequences of pollution in aquatic and terrestrial ecosystems. She serves on a technical advisory committee seeking to develop management and restoration plans in the Finger Lakes region of NY. For the scientific community, she regularly reviews journal articles & proposals, has served on several review panels, and actively participates in community activities such as the Consortium of Universities for the Advancement of Hydrologic Sciences. Recently she has been selected to serve on a steering committee for an upcoming workshop (sponsored by the National Science Foundation) focusing on aspects of the nitrogen cycle, and has been elected Chair of an upcoming Gordon Conference on the topic of catchment science. She is an active member of several committees providing service to the American Geophysical Union. Sources of recent research grant awards include the New York State Energy Research & Development Authority, the US Environmental Protection Agency, and the US Department of Agriculture.

Castro,Mark

University System of Maryland

Dr. Mark Castro is an associate professor at the Appalachian Laboratory of the University of Maryland Center for Environmental Science. He holds a Ph.D. from the University of Virginia, Department of Environmental Sciences. He is a biogeochemist, specializing in the interactions between the atmosphere and terrestrial and aquatic ecosystems. He has completed several studies that document the impacts of forest management on soil trace gas fluxes. He has been involved in collaborative projects designed to assess the importance and impacts of atmospheric deposition on terrestrial ecosystems and estuaries. Currently, He is studying the movement of mercury from the atmosphere through mixed land-use watersheds into freshwater lakes and the biotic communities. In addition, He is establishing an atmospheric chemistry/meteorological station in western Maryland to examine the transport of pollutants into the Chesapeake Bay watershed. His research has been supported by national (NSF, NOAA, DOE), state (MDNR and MDE) and a private foundation (A.W. Mellon).

Driscoll, Jr.,Charles T. (Candidate Chair for the Subcommittee)

Syracuse University

Dr. Charles T. Driscoll received his B.S. degree in Civil Engineering from the University of Maine in 1974. He received his M.S. in 1976 and Ph.D. in 1980 in Environmental Engineering from Cornell University. In 1979 he took a position on the faculty of the Department of Civil and Environmental Engineering at Syracuse University. Dr. Driscoll is currently University Professor of Environmental Systems Engineering and Director of the Center for Environmental Systems Engineering at Syracuse University. His teaching and research interests are in the area of environmental chemistry, biogeochemistry and water quality modeling. A principal research focus has been the investigation of effects of air pollution on forest, aquatic and coastal ecosystems. His research on effects of acidic deposition was initiated in the mid-1970s when he developed analytical techniques to determine the speciation of aluminum in solution and conducted field measurements to evaluate the forms of aluminum in acid-impacted waters and their effects of fish. Since that time he has used a variety of research approaches to study the effects of atmospheric deposition on forest, aquatic and coastal ecosystems, including field investigations, laboratory studies, long-term field measurements, whole-ecosystem manipulation studies, and the development and application of models. Dr. Driscoll has authored or co-authored more than 240 peer-reviewed articles, many of which focus on effects of acid rain. He has had more than 70 funded research projects, most of these were obtained from competitive research programs such as the National Science Foundation and the Environmental Protection Agency and many address impacts of air pollutants on forest and aquatic ecosystems. He is currently the principal investigator of the National Science Foundation Long-Term Ecological Research project at the Hubbard Brook Experimental Forest, New Hampshire. Dr. Driscoll has received numerous awards and honors. In 1984, he was designated as a Presidential Young Investigator by the National Science Foundation. He has provided expert testimony on ecological effects of air pollution to the Senate Commerce Committee and the House Science Committee. He has been acknowledged by the Institute for Scientific Information (ISI) as one of the top 250 most highly cited researchers in two areas: environmental science and engineering. Dr. Driscoll has served on many local, national and international committees. He was a member of the National Research Council Panel on Process of Lake Acidification. He currently is a member of the National Research Council Committee of Air Quality Management. He is currently a member of the board of trustees of the Hubbard Brook Research Foundation and the Upstate Freshwater Institute.

Goodale,Christine

Cornell University

Dr. Christine Goodale is an Assistant Professor in the Department of Ecology and Evolutionary Biology at Cornell University. Dr. Goodale previously held postdoctoral fellowships at the Woods Hole Research Center (Woods Hole, MA) and the Carnegie Institute of Washington (Stanford, CA). She received her Ph.D. and M.S. in natural resources from University of New Hampshire, and an A.B. in biology, geography, and environmental studies from Dartmouth College. Her research centers on understanding the effects of human activities on temperate forests, including the direct effects of land-use change and the indirect effects of human alteration of carbon and nitrogen cycles. Key research questions include: How have direct and indirect human activities affected forest growth and net carbon accumulation? What factors control the spatial and temporal patterns of watershed nitrogen retention? How do the legacies of past disturbances affect current rates of carbon and nitrogen accumulation? Research approaches range from plot-level field studies to regional modeling and collaborative data syntheses.

Grossman,Dennis

NatureServe

Dr. Dennis H. Grossman is the Vice President for Science at NatureServe, a non-profit conservation organization working throughout the Western Hemisphere. He holds a B.S. in ecology from the University of Wisconsin (1976), an M.S. in Plant Ecology from the University of Wisconsin (1982), and a Ph.D. in Plant Ecology from the University of Hawaii (1991). Prior to working at the Conservancy, Dr. Grossman was Chief Ecologist at The Nature Conservancy for 12 years after working as a Research Fellow at the Environment and Policy Institute of the East-West Center in Honolulu. Dr. Grossman has worked extensively with vegetation science, ecology, and conservation biology projects across the Upper Midwest, California, and Hawaii as well as in India and Indonesia. These projects include the inventory, data management and analysis, classification, mapping, conservation ranking and conservation planning for terrestrial, freshwater and coastal-marine communities. Dr. Grossman was a principal developer of the National Vegetation Classification System for the United States that is currently endorsed as an inter-agency standard by the Federal Geographic Data Committee. He has published numerous articles on ecological classification and conservation and currently manages numerous projects associated with the implementation of these methods. Dr. Grossman is a member of the Ecological Society of America and the Society for Conservation Biology, and serves Vegetation Subcommittee of the Federal Geographic Data Committee and on the executive committee of the ESA Panel for Vegetation Classification. Grant and contract support comes primarily from federal agencies, private foundations and the National Science Foundation.

Harrison,Keith

Michigan Environmental Science Board

Mr. Keith G. Harrison has been employed with the state of Michigan for 23 years. For the last 11 years, he has held two concurrent positions within state government. He has served from 1992 - 1997 as the Director of, initially, the Michigan Department of Management and Budget's Environmental Administration Division and, later (since 1997) due to interdepartmental transfer, the Michigan Department of Environmental Quality's Office of Special Projects (OSP)(1). He also has served since 1992 as the Executive Director of the Michigan Environmental Science Board. Concurrent with the two positions above, he currently is assigned as a consultant to the U.S. Environmental Protection Agency Science Advisory Board's Ecological Processes and Effect Committee, and from May to October 2001, he served as the Acting Director of the Michigan Office of the Great Lakes. Previous positions held within state government include two years as Environmental Affairs Manager for the Michigan Department of Corrections; five years as Senior Environmental Specialist for the Michigan Toxic Substance Control Commission, and four years with the Michigan Department of Public Health. Prior to state service, Mr. Harrison was employed as a Senior Ecologist with an environmental engineering firm; Chief Environmental Planner for a regional planning agency; and Sanitarian with a local county health department. Mr. Harrison obtained his Bachelor of Science degree in 1972 in fisheries and wildlife biology from Michigan State University and a Master of Arts degree in 1974 in biology (ecology) from Western Michigan University. He has been licensed since 1978 as a Registered Sanitarian and Registered Environmental Health Specialist, and, since 1981, has been certified as an Ecologist by the Ecological Society of America. Mr. Harrison's professional research and work have resulted in over 80 governmental and professional scientific publications addressing a wide variety of environmental, environmental health, natural history, and natural resources management topics. His areas of expertise are ecology, environmental science, and environmental health science. He has recently served as Michigan's representative to the Great Lakes Commission's Project Management Team on the development of a decision tool to review the use and management of Great Lakes surface and groundwater and as invited expert peer reviewer for the USEPA its Environmental Indicators Initiative for the United States.

Nixon, Scott W.

University of Rhode Island

Dr. Scott W. Nixon is professor of oceanography in the Graduate School of Oceanography of the University of Rhode Island where he has been on the faculty since 1970. In addition, he served for 16 years as director of the Rhode Island Sea Grant College Program, returning to full time graduate teaching and research in 1999. He received his B.A. in 1965 from the University of Delaware in biology and a Ph.D. in botany (ecology) from the University of North Carolina at Chapel Hill in 1970. He has received numerous awards recognizing his research in estuarine and coastal ecology. His research has focused on the fundamental processes governing primary and secondary production in coastal ecosystems and the biogeochemical cycling of carbon, nitrogen, phosphorus, and silica in coastal environments. He has served on a variety of national Research Council committees concerned with coastal ecology and restoration, and was made a lifetime National Associate of the National Academies in 2002. He has also served for many years as the Co-Editor in Chief of Estuaries, the journal of the Estuarine Research Federation. His research has been supported by EPA, NSF, NOAA, and the US ACOE. He has published over 100 scientific and technical papers and several popular articles about coastal issues.

Ollinger, Scott

University of New Hampshire

Dr. Scott Ollinger is an Assistant Professor at the University of New Hampshire with joint appointments in the Institute for the Study of Earth, Oceans and Space and the Department of Natural Resources. He earned a Bachelor's degree in Ecology and Environmental Science from Purchase College in 1989 and Master's and Ph.D. degrees in Natural Resources from the University of New Hampshire in 1992 and 2000. His research interests include forest ecology and biogeochemistry with emphasis on basic ecological processes and interactions with human-induced environmental change. His current research involves understanding the combined effects of multiple atmospheric factors—including nitrogen deposition, tropospheric ozone pollution and elevated CO₂—on rates of productivity and carbon storage in forests. He is also interested in the use of foliar chemistry as an indicator of ecosystem carbon-nitrogen interactions. His work is part of the recently-formed North American Carbon Program and he currently acts as the principal investigator of a NASA aircraft remote sensing campaign. He has published on a variety of topics including climate and atmospheric chemistry, growth and nutrient status of temperate forests, and the use of hyperspectral remote sensing in regional ecological analyses. Dr. Ollinger's research has been funded through competitive grants from the National Aeronautics and Space Administration (NASA), the U.S. Department of Agriculture, the U.S. Department of Energy and the U.S. Environmental Protection Agency. In addition to his research activities, Dr. Ollinger teaches courses in Terrestrial Ecosystems and Forest Ecology and serves on several science advisory committees. Recent service in this regard includes the Hubbard Brook Research Foundation's Science Links Program, the Scientific Committee on Problems in the Environment (SCOPE) and the New York State Energy Research and Development Authority.

Roughgarden, Joan

Stanford University

Dr. Joan Roughgarden spent her early childhood in the Philippine Islands and Indonesia. She majored in biology and philosophy at the University of Rochester, and received a Ph.D. in theoretical ecology from Harvard University. She is Professor of Biological Sciences at Stanford University, and author of five books and over 120 papers in academic journals. She founded and directed the Earth Systems Program at Stanford, and was awarded for service to undergraduate education. She has also supervised over 30 doctoral and postdoctoral students. Joan lives in San Francisco. Her current research links ecology with economic theory. She does not have any extramural grants to support the research she's done on ecological economics. She presently has a grant proposal under review at the NSF to continue research on the community ecology of Anolis lizards in the Lesser Antilles.

Smith, Bradley

Western Washington University

Dr. Bradley Smith is Dean of the Huxley College of the Environment at Western Washington University. He has 30 years of national and international experience in the environmental arena including city, state and federal experience. Dr. Smith is formerly a member of the Senior Executive Service USEPA. He holds a BA, an MA in Political Science/Public Administration and a Ph.D from the School of Natural Resources and the Environment (University of Michigan). He has extensive experience in the area of interface between science and policy. Dr. Smith is currently Chair (Governor appt) of the Governor's Sustainable Washington Advisory Board. He is President elect of the Council of Environmental Deans and Directors. Dr. Smith is also Environmental advisor to General Motors Corp. NATO Fellow (risk assessment). He formerly served on the Presidents Council for Sustainability (education task force). Recent financial support includes NSF, GM, USIA and DOE. He has authored several books including ENVIRONMENTAL SCIENCE-A STUDY OF INTERRELATIONSHIPS 9th ed. (McGraw-Hill).

Stahl,Ralph

Dupont

A native of Houston, Texas, Dr. Stahl received his B.S. in Marine Biology from Texas A&M University (cum laude) in 1976, his M.S. in Biology from Texas A&M University in 1980 and his Ph.D. in Environmental Science and Toxicology from the University of Texas School of Public Health in 1982. After receiving his Ph.D., he was a Senior Postdoctoral Fellow in the Dept. of Pathology at the University of Washington in Seattle where he investigated the impact of genetic toxins on biological systems. Ralph joined the DuPont Company in 1984 and in the intervening years has held both technical and management positions in the research and consulting arenas. His research over the last 20 years has focused primarily on evaluating the effects of chemical stressors on aquatic and terrestrial ecosystems. He has been involved with oceanographic studies in the Atlantic, Pacific, Gulf of Mexico and Caribbean Sea, biological and ecological assessments at contaminated sites in the US and Europe, and numerous toxicological studies with mammals, birds and aquatic organisms. He has been selected by US EPA, Army Corps of Engineers, SERDP, National Academy of Science, the Water Environment Research Foundation, NOAA and others to national peer review panels on ecological risk assessment, endocrine disruption in wildlife, and natural resource injury determination. Ralph is active in the Society of Environmental Toxicology and Chemistry, serving on the Ecological Risk Assessment Advisory Group and the Technical Committee, and is a Diplomate of the American Board of Toxicology. He has authored over 25 peer reviewed publications and two books in environmental toxicology and most recently has been responsible for leading DuPont's corporate efforts in ecological risk assessment and natural resource damage assessments for site remediation. Ralph chairs the American Chemistry Council's (formerly CMA) Environmental Technical Implementation Panel that is implementing ecological research under the chemical industry's Long Range Research Initiative.