

ROBERT D. PERLACK
Oak Ridge National Laboratory
P.O. Box 2008
Oak Ridge, TN 37831-6205

perlackrd@ornl.gov
Office: 865-574-5186
Fax: 865-574-8884

Summary of Qualifications

- Over 25 years experience in energy/environmental economic assessment, global climate change analysis, and policy analysis
- Substantial international energy and environmental assessment experience

Work History and Accomplishments

- 1980 to present** **Oak Ridge National Laboratory, Oak Ridge, TN**
Environmental Sciences Division, Bioenergy Systems Group
- Providing economic and technical analysis and management to a variety of projects for the U.S. Department of Energy, the U.S. Federal Energy Regulatory Commission, and the U.S. Agency for International Development.
 - Recent activities: economic and policy analysis of bioenergy systems; adaptation responses to climate change; strategic environmental and economic assessments in developing countries; water policy studies involving conflicts between off-stream and in-stream uses; analysis of benefits at federal headwater dams; evaluation and development of performance metrics; and analysis of land use management strategies for greenhouse gas mitigation.
- 1974 – 1980** **University of Massachusetts, Dept. of Resource Economics, Amherst**
Assistant Professor and Research Assistant
- 1980** **Antioch/New England Graduate School, Keene, NH**
Adjunct Faculty

Education and Training

Ph.D., Resource Economics, 1978, University of Massachusetts, Amherst
M.S., Resource Economics, 1975, University of Massachusetts, Amherst
B.S., Industrial Management, 1972, Lowell Technological Institute, Lowell, Mass.

Representative Publications

- Wilbanks, T., P. Leiby, and R. Perlack, Integration Modelling of Mitigation and Adaptation Pathways, AAAS, Boston, February 2002.
- Perlack R. D. and A. Turhollow, *Assessment of Options for the Collection, Transport, and Processing of Corn Stover*, ORNL/TM-2002/44, Oak Ridge National Laboratory, January 2002.
- Perlack, R. D. and J. T. Ensminger, Guatemala Strives for Environmental and Economic Sustainability in the Rio Dulce Region, *Natural Resources Forum*, August 2001.
- Ensminger, J. T., R. D. Perlack, Romeo Martinez, Patricia Orantes, Hugo Beteta, and Elisa Colom, *Evaluacion Ambiental de Opciones de Manejo Para el Parque Nacional Rio Dulce*, Prepared for the Comision Nacional del Medio Ambiental (Guatemala) and U.S. Agency for International Development, June 2000.
- Bao Y. S., M. J. Sale, and R. D. Perlack, *Enhanced Flow Duration Analysis Method (EFDAM) to Determine Headwater Benefits*, Prepared for the Federal Energy Regulatory Commission, Office of Energy Projects, Oak Ridge National Laboratory, Oak Ridge Tenn., June 6, 2000.
- Sale, M. J. M. J. Peterson, R. D. Perlack, M. G. Ryon, C. C. Coutant, B. Vogt Sorenson, H. G. Quarles, and K. J. Beason, *Proposed Changes in Minimum Flow Requirements at the Potter Valley Project*, Final Environmental Impact Statement (Vols. 1 and 2), FERC Project No. 77-110, Federal Energy Regulatory Commission, FERC/EIS-0119F, Washington, May 2000.

- Ensminger, J. T., R. D. Perlack, and R. Martinez, *Proyecto de Reglamento de Navegion de las Aguas Del Parque Nacional Rio Dulce y Mechanimos para Financiar la Aplicaion del Reglamento*, prepared for the U.S. Agency for International Development, Comision Nacional de Medio Ambiente, and Consejo Nacional de Areas Protegidas, Guatemala City, December 1999.
- R. Martinez, Ensminger, J. T., R. D. Perlack, O. Garcia, and A. Sobenes, *Reglamento de Auditorias Ambiental*, prepared for the U.S. Agency for International Development, Comision Nacional de Medio Ambiente and Consejo Nacional de Areas Protegidas, Guatemala City, December 1999.
- R. Martinez, Ensminger, J. T., and R. D. Perlack, *Politica Ambiental para Exploracion, Explotacion y Transporte de Petroleo y Gas Natural*, prepared for the U.S. Agency for International Development, Comision Nacional de Medio Ambiente, and Consejo Nacional de Areas Protegidas, Guatemala City, December 1999.
- Ensminger, J. T., R. D. Perlack, and R. Martinez, *Mejores Practicas de Gestion para Exploracion, Explotacion y Transporte de Petroleo y Gas Natural*, prepared for the U.S. Agency for International Development, Comision Nacional de Medio Ambiente, and Consejo Nacional de Areas Protegidas, Guatemala City, December 1999.
- R. Martinez, Ensminger, J. T., R. D. Perlack, A. Sobenes, and O. Garcia, *Recomendaciones: Reglamento Sobre Estudios de Evaluacion de Impacto Ambiental, y Directrices para la Preparacion de Evaluaciones de Impacto Ambiental para Operaciones Petroleras* prepared for the U.S. Agency for International Development, Comision Nacional de Medio Ambiente, and Consejo Nacional de Areas Protegidas, Guatemala City, December 1999.
- Barron W. F., R. D. Perlack, and J. J. Boland, *Fundamentals of Economics for Environmental Managers*, Quorum Books, Westport CT, May 1998.
- Ensminger, J. T., R. D. Perlack, T. J., and Wilbanks, "Strategic Environmental and Economic Assessment of Policy and Management Options for the Rio Dulce National Park, Guatemala," presented at Sustainability and the Role of Impact Assessment in the Global Economy, 18th Annual Meeting of the International Association for Impact Assessment, April 19-24, 1998, Christchurch, NZ.
- Bao S., R. D. Perlack, and M. J. Sale, *Alternative Methods to Determine Headwater Benefits from Federal Reservoir Projects*, Oak Ridge National Laboratory, ORNL/TM-13496, November 1997.
- Perlack, R. D., L. L. Wright, and M. Huston, *Biomass Fuel from Woody Crops for Electric Power*, Winrock International, Biomass Energy Systems and Technology Project, Bioenergy Systems Report, December 1997.
- Ensminger, J. T., R. D. Perlack, and J. W. Ranney, *The Transport of Gmelina Logs on the Rio Dulce: Final Environmental Impact Assessment*, Oak Ridge National Laboratory, Prepared for the Comision Nacional del Medio Ambiental (Guatemala) and U.S. Agency for International Development, April 1997.

Other Pertinent Information

International Country Experience

- *Belize* – Evaluated prospects for rural power systems and photovoltaic systems as an alternative to electric grid extension.
- *China* – Conducted economic/financial assessments of the potential of stand-alone and cogeneration power systems using bagasse and plantation-grown biomass. Evaluated the environmental benefits of biogas, solar thermal, and bagasse cogeneration systems.
- *Dominican Republic* – Evaluated the economic feasibility of rural photovoltaic systems and developed financial mechanisms to increase their diffusion.
- *Guatemala* – Prepared strategic environmental and economic assessment of the Rio Dulce National Park. Prepared generic environmental impact statement and environmental policy for petroleum exploration, production, and transport. Prepared environmental impact statement on the feasibility of transporting gmelina logs. Led mid-term evaluation of the Central American rural electrification project. Evaluated the feasibility of hydro, wind, and photovoltaic energy systems.
- *Haiti* – Evaluated the economics of short-rotation forestry and agroforestry as feedstock sources for household fuel wood and charcoal.
- *Honduras* – Evaluated prospects for rural power systems as an alternative to traditional electric grid extension.
- *India* – Evaluated the economics of sugar mill cogeneration using a combination of bagasse, agricultural residues, and plantation-grown biomass.

- *Liberia* – Conducted economic evaluations of isolated rural power stations and assisted with energy policy decisions regarding renewables, hydropower, and petroleum development.
- *Malaysia and Sri Lanka* – Participated in extended technical and training conferences involving the economic analysis of rural energy systems.
- *Panama* – Conducted site visit to assess watershed management issues and potential collaboration.

Certification of Authenticity

This resumé has been certified for accuracy by Robert D. Perlack on February 21, 2002, and by Jeffrey E. Christian, Center Director, ORNL Buildings Technology Center, on February 21, 2002.