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Department of Earth and Environmental Science  
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## **Education**

Doctor of Philosophy, 1987. Dept. of Geography and Environmental Engineering, Johns Hopkins University, Baltimore Maryland. Dissertation: "Sediment Budgets and Delivery in Suburban Watersheds".

Master of Arts, 1982. Dept. of Earth & Environmental Science, Wesleyan University, Middletown Connecticut. Thesis: "Patterns of Bedload Transport in the Connecticut River Estuary".

Bachelors of Arts, 1977. Dept. of Geology, San Francisco State University, San Francisco California. Senior Thesis: "A Fortran Computer Program for Calculating the CIPW Normative Mineral Suite".

## **Professional Experience**

Department of Earth & Environmental Science, University of Pennsylvania, Philadelphia, Pa. Appointed Professor July 2002, Department Chair July 2003-present

International Institute of Tropical Forestry, USDA Forest Service, Rio Piedras, Puerto Rico. Research Hydrologist and Principal Scientist of Bisley Experimental Watersheds, GS-12 Term position 1987-1989, GS-13 Research Scientist 1989-95, Acting Assistant Director, 1992-3. Ecosystem Group Leader GS-14, 1994-2000, GS-15, 2000-2002, Adjunct Scientist 2002-present.

Luquillo Long-Term Ecological Research Project, 1988-present. Principal Co-Investigator of NSF funded project 1988-1999. Principal Investigator 1999-present.

Adjunct Professor. Department of Biology, University of Puerto Rico. 1991-present.

Consulting Hydrologist and Geomorphologist (1978 to 1987).

Century Engineering Inc., Towson, Maryland, 1985-1987; Urban and storm water hydrology.  
Foster Parents Plan Inc. 1983. Rural community water Development, Colombia S.A.  
U.S. Peace Corps/USAID, Malawi, Central Africa, 1982. Jamaica 1983  
Church World Services Dominican Republic, 1978-1979. Community water development.

U.S. Peace Corps Volunteer, 1977-1979. Hydrologist, National Institute of Potable Water and Sewage, Dominican Republic, Municipal water resource development.

## **Recent Professional Activities**

Board of Directors Consortium of Universities for the Advancement of Hydrologic Sciences, Inc. (CUAHSI). Elected to 1 year term in 2004, Elected to 3 year term in 2005

Franklin Institute Award Committee of Arts and Science, Earth Science Cluster. 2003-present

UNESCO Regional Office for Science and Technology in Latin America. Regional Expert for Caribbean Basin AMIGO/Friend Project in Regional Hydrology, 1999-present

UNSECO HELP-FRIEND-PUB Technical Liaison Group. Coordination meeting Corvallis, Oregon, November 2005

### **Educational Advisory Activities**

La Selva Biological Field Station Advisory Committee, Organization of Tropical Studies, Costa Rica, 1999-2001-4, Advisory Committee Chair 2001-2004

Dean of Natural Science Advisory Board on graduate program in Environmental Science, University of Puerto Rico, Rio Piedras 2001-2002

Puerto Rico Water Resources and Environmental Research Institute Advisory Board, Department of Civil Engineering, University of Puerto Rico, Mayaguez Campus; 1996-2002

### **Educational Outreach**

El Verde REU-Program Mentor; 2002-present

The Weather Channel, subject matter consultant for television documentary on Tropical Montane Cloud Forests by Towers Productions, Nov. 2000

Educational Module Advisory Board, Center for Educational Technologies, Wheeling Jesuit University, Wheeling, WV. 1998-2000

British Broadcasting Company, Raging Planet Series on Hurricanes. Subject matter expert on ecological and geomorphic impacts of hurricanes on tropical forests. 1998-1999

### **Advisor to Commonwealth Government of Puerto Rico**

Governors Technical Review Committee, North Coast Super-Aqueduct Project, 1994  
Puerto Rico Water Resource Committee, 1995-1997

### **Advisor to U.S. Federal Government Agencies in Puerto Rico 1987-2002.**

U.S. Army Corps of Engineers: Rio Mameyes Management Committee.  
U.S. Fish and Wildlife Service: Advisor on in-stream flow requirements.  
U.S. Federal Emergency Management Agency: Two hurricane assessment teams.  
U.S. EPA San Juan Bay Estuary Program: Technical advisor.

Environmental Law Clinic, University of Puerto Rico and the Inter-American University.  
Expert advisor on hydrological issues and expert witness in 3 litigations, 1997- 2002

U.S. Agency for International Development, Panama Mission. Panama Canal Environmental Monitoring project, August 1998

## Peer Reviewed Publications

Heartsill-Scalley T., Scatena F.N., Estrada C., McDowell W.H., Lugo A.E., 2006. Disturbance and long-term patterns of rainfall and throughfall nutrient fluxes in a subtropical forest in Puerto Rico. *Journal of Hydrology*, in press

Wei Wu, Hall CAS., Scatena FN., 2006 Modeling the impact of land use change on the stream flows at the meso-scale watershed level in North-Eastern Puerto Rico. *Hydrological Processes*, in press.

Wei Wu, Hall C.A.S., Scatena F.N., Quackenbush L.J., 2006. Spatial modeling of evapotranspiration in the Luquillo Experimental Forest of Puerto Rico using Remotely-sensed data. *Journal of Hydrology* 328:733-752

Blanco J.F., Scatena F.N., 2006. The Spatial Arrangement of *Neritina virginea* during upstream migration. *River Research and Applications*.

Holwerda F., Burkard R., Eugster W., Scatena F.N., Meesters A.G., Bruijnzeel L.A., 2006 Estimating fog deposition at a Puerto Rican elfin cloud forest site: comparison of the water budget and eddy covariance methods. *Hydrological processes* 20:2669-2692

Holwerda F., Scatena F.N., Bruijnzeel L.A., 2006. Throughfall in a Puerto Rican lower montane rainforest: A comparison of sampling strategies *Journal of Hydrology*. 327: 592-602

Blanco J.F., Scatena F.N., 2006. Hierarchical contribution of river-connectivity, water chemistry, hydraulics, and substrate to the distribution of diadromous snails in Puerto Rican Streams. *J.N. Am. Benthol. Soc.* 2006. 25(1):82-98

Brown K.A., Scatena F.N., Gurevitch J., 2006. Effects of an invasive tree on community structure and diversity in a tropical forest in Puerto Rico. *Forest Ecology and Management* 226:145-152

Beard K.H., Vogt K.A., Vogt D.J., Scatena F.N., Covich A.P., Sigurdardottir R., Siccama T.C., Crowl, T.A., 2005. Structural and Functional Responses of a Subtropical Forest to 10 years of Hurricanes and Droughts. *Ecological Monographs* 75(3):345-361

Ortiz-Zayas J.R., Lewis W.M., Saunders J.F., McCutchan J.H., Scatena F.N., 2005 Metabolism of a tropical rainforest stream. *J.N. American Benthological Society* 24(4):769-783

Blanco J.F., Scatena F.N., 2005. Floods, Habitat Hydraulics and Upstream Migration of *Neritina virginea* (Gastropoda: Neritidae) in Northeastern Puerto Rico). *Caribbean Journal of Science*, Vol. 41, No. 1:55-74

Blanco J.F., Scatena F.N., 2005 Hydraulics and spatial arrangement of tropical neritid snails (*Neritina virginea*, Gastropoda: Neritidae) during upstream migration under a road crossing. Submitted to *River Research and Applications*, In press

- Ortiz-Zayas J.R., Scatena F.N., 2004 Integrated Water Resources Management in the Luquillo Mountains, Puerto Rico: An Evolving Process. *International Journal of Water Resources Development* Vol. 20 No. 3, 387-398 September 2004
- Scatena F.N. 2004. A survey of methods for setting minimum instream flows standards in the Caribbean Basin. *River Research and Applications* Vol 20: 127-135
- Schellekens J., Scatena F.N., Bruijnzeel L.A., van Dijk A.I. J.M., Groen M.M.A., van Hoogezand R.J.P., 2004. Stormflow generation in a small rain-forest catchment in the Luquillo Experimental Forest, Puerto Rico. *Hydrological Processes* 18. 505-530
- Ruan H.H., Zou X.M., Scatena F.N., Zimmerman J.K., 2004. Asynchronous fluctuation of soil microbial biomass and plant litterfall in a tropical wet forest. *Plant and Soil* 260: 147-154
- Scatena F. N., 2003. A Preliminary Estimate of the Natural and Social Value of Los Tres Picachos. *Acta Cientifica* 17(1-3):59-61
- Santos-Román D.M., Warner G.S., Scatena F.N. 2003, Multivariate Analysis of Water Quality and Physical Characteristics of Selected Watersheds in Puerto Rico. *Journal of the American Water Resources Association* 39(4): 829-839
- Beard K. H., Eschtruth A.K., Vogt K.A., Scatena F.N. 2003. The effects of the frog *Eleutherodactylus coqui* on invertebrates and ecosystem processes at two scales in the Luquillo Experimental Forest, Puerto Rico. *Journal of Tropical Ecology* 19:607-617.
- Planos Gutiérrez E.O., Scatena F.N. 2003. Intense Precipitations in Cuba. *IMPACT. Journal of the American Water Works Association. September Issue 2003*
- March J.G., Benstead J.P., Pringle C.M., Scatena F.N., 2003. Damming tropical islands streams: Problems, Solutions, and Alternatives. *Bioscience* November 2003/Vol. 53 No. 11:1069-1071
- Covich A.P., Crowl T.A., Scatena F.N., 2003. Effects of extreme low flows on freshwater shrimps in a perennial tropical stream. *Freshwater Biology* V48: 1199-1206
- Ostertag R., Scatena F.N., Silver W.L., 2003. Forest Floor Decomposition following hurricane litter inputs in several Puerto Rican Forests. *Ecosystems* 6:261-273
- Blundell A.G., Scatena F.N., Wentsel R., Sommers W., 2003. Ecorisk Assessment Using Indicators of Sustainability: Invasive Species in the Caribbean National Forest of Puerto Rico. *Journal of Forestry* Vol 101, Number 1:14-19
- Wang H. Hall C.A.S., Scatena F.N., Fetcher N., Wei Wu, 2002. Modeling the spatial and temporal variability in climate and primary productivity across the Luquillo Mountains, Puerto Rico. *Forest Ecology and Management* 6118: 1026
- Vogt K.A., Beard K.H., Hammann S., O'Hara Palmiotto J., Vogt D.J., Scatena F.N., Hecht B.P., 2002. Indigenous Knowledge Informing Management of Tropical Forests: The link between Rhythms in Plant Secondary Chemistry and Lunar Cycles. *Ambio* Vol. 31 No. 6 Sept. 2002

Cox S.B., Willig M.R., Scatena F.N., 2002, Variation in nutrient characteristics of surface soils from the Luquillo Experimental Forest of Puerto Rico-A multivariate perspective. *Plant and Soil* vol. 247, No. 2:189-198

Rivera-Ramirez H.D., Warner G.S., Scatena F.N., 2002. Prediction of Master Recession Curves and Baseflow Recessions in the Luquillo Mountains of Puerto Rico. *Journal of the American Water Resources Association*, Vol. 38, No. 3:693-704

Frizano J., Johnson A.H., Vann D.R., Scatena F.N., 2002. Soil phosphorus fractionation during forest development on landslides scars in the Luquillo Mountains, Puerto Rico. *Biotropica*. Vol. 34 #1: 17-26

Scatena F.N., 2001. Ecological rhythms and the management of humid tropical forests: Examples from the Caribbean National Forest, Puerto Rico. *Forest Ecology and Management* 5528:1-12

Lugo A.E., Silver W.L., Brown S., Scatena F.N., Ewel J.J., 2001. Managed Ecosystems Deserve Greater Attention. *Bulletin of the Ecological Society of America*, Vol. 82, No 1:91-93

Schellekens J., Bruijnzeel L.A., Scatena F.N., Bink N.J., Holwerda F., 2000. Evaporation from a tropical rain forest, Luquillo Experimental Forest, eastern Puerto Rico. *Water Resources Research* Vol. 36, No. 8:2183-2196

Richardson B.A., Richardson M.J., Scatena F.N., McDowell W.H., 2000. Effects of nutrient availability and other elevational changes on bromeliad populations and their invertebrate communities in a humid tropical forest in Puerto Rico. *Journal of Tropical Ecology* Vol. 16:167-188

Covich A.P., Crowl T.A., Scatena F.N., 2000. Linking habitat stability to floods and droughts: effects on shrimp in montane streams, Puerto Rico. *Verhandlungen Internationale Vereinigung fur Theoretische und Angewandte Limnologie* Vol. 27: 2430-2434

Crowl T.A., Bouwes N., Townsend M.J., Covich A.P., Scatena F.N., 2000. Estimating the potential role of freshwater shrimp on an aquatic insect assemblage in a tropical headwater stream: A bioenergetic approach. *Verhandlungen Internationale Vereinigung fur Theoretische und Angewandte Limnologie* Vol. 27: 2403-2407

Schaffer D.A., McDowell W.H., Scatena F.N., Asbury C.E., 2000. Effects of Hurricane Disturbance on Stream Water Concentrations and Fluxes in Eight Tropical Watersheds of the Luquillo Experimental Forest, Puerto Rico. *Journal of Tropical Ecology* Vol. 16:189-207

O'Connor P.J., Covich A.P., Scatena F.N., Loope L.L. 2000. Non-indigenous bamboo along headwater streams of the Luquillo Mountain, Puerto Rico: leaf fall, aquatic leaf decay and patterns of invasion. *Journal of Tropical Ecology*, Vol. 16:499-516

Odum H.T., Doherty S.J., Scatena F.N., Kharecha P., 2000. Emergency Evaluation of Reforestation Alternatives in Puerto Rico. *Forest Science*. Vol 46, No. 4:521-530

Kent R., Odum H.T., Scatena F.N. 2000. Eutrophic overgrowth in the self-organization of tropical wetlands illustrated with a study of swine wastes in rainforest plots. *Ecological Engineering* Vol. 16:255-269

Benstead P.J., March J.G., Pringle C.M., Scatena F.N., 1999. Effects of a Low-Head Dam and Water Abstraction on Migratory Tropical Stream Biota. *Ecological Applications* Vol. 9(2):656-668

Schellekens J., Scatena F.N., Bruijnzeel L.A., 1999 Modeling rainfall interception by a lowland tropical rain forest in northeastern Puerto Rico. *Journal of Hydrology*. Vol. 225:168-184

Waide R.B., Zimmerman J.K., Scatena F.N., 1998. Controls of Primary Productivity: Lessons from the Luquillo Mountains in Puerto Rico. *Ecology* Vol. 79(1):31-37.

Schellekens J., Bruijnzeel L.A., Wickel A.J., Scatena F.N., Silver W.L., 1998. Interception of horizontal precipitation by elfin cloud forest in the Luquillo Mountains, Eastern Puerto Rico. *First International Conference on Fog and Fog Collection*, eds. Schenenaue and H.A. Bridgeman, pp.29-32, Vancouver, Canada

Scatena F.N. 1998. Climate change and the Luquillo Experimental Forest of Puerto Rico: Assessing the impacts of various climate change scenarios. *American Water Resources Association TPS-98-2*: 193-198

Covich A.P., Crowl T.A., Johnson S.L., Scatena F.N. 1998. Effects of drought on pool morphology and benthic macroinvertebrates in headwater streams of the Luquillo Experimental Forest, Puerto Rico. *American Water Resources Association TPS-98-2*: 91-96

Olander L.P., Scatena F.N., Silver W.L., 1998. Impacts of disturbance initiated by road construction in a subtropical cloud forest in the Luquillo Experimental Forest, Puerto Rico. *Forest Ecology and Management* Vol. 109:33-49

March J.G., Benstead J.P., Pringle C.M., Scatena F.N., 1998. Migratory drift of larval shrimp in two tropical streams, Puerto Rico. *Freshwater Biology* Vol. 40:261-274

Lopez del Mar T., Aide T.M., Scatena F.N., 1998. The effect of land use on soil erosion in the Guadiana watershed in Puerto Rico. *Caribbean Journal of Science* Vol. 34, No. 3-4:298-307

Walker R.T., Homma A.K.O, Scatena F.N., de Conto A.J., Rodriguez-Pedrazza C.D., Ferreira C.A.P., de Oliveira P.M., Carvalho R. A., 1997. Land Cover Evolution of Small Farms: The Trans-Amazonian Highway. *Revista Economia Sociologia Rural* ISSN 0103-2003 Vol. 35 No. 2: 115-126

Silver W.L., Scatena F.N., Johnson A.H., Siccama T.G., Watt F., 1996. At what temporal scales does disturbance affect belowground nutrient pools? *Biotropica* Vol 28, #4a: 441-458

Vogt K.A., Vogt D.J., Boon P., Covich A., Scatena F.N., Asbjornsen H., O'Hara J.L., Perez J., Siccama T.G., Bloomfield J., Ranciato J.F., 1996. Litter Dynamics along Stream, Riparian and

Upslope Areas Following Hurricane Hugo, Luquillo Experimental Forest, Puerto Rico. *Biotropica* Vol. 28, #4a:458-470

Scatena F.N., Walker R.T., Homma A.K.O., 1996. Farm-level landuse dynamics in the piedmont landscape of the Brazilian Amazon: A case study from Santarem, Para, Brazil. *Ecological Economics* V 18: 29-40

García-Martino A.R., Scatena F.N., Warner G.S., Civico D.L., 1996. Statistical Low Flow Estimation using GIS Analysis in Humid Montane Regions in Puerto Rico. *Bulletin of the American Water Works Association*, Vol. 32 #6:1-13

García-Martino A.R., Warner G.S., Scatena F.N., Civico D.L., 1996. Rainfall and elevation relationships in the Luquillo Mountains of Puerto Rico. *Caribbean Journal of Science* Vol. 32, No.4, 413-424

García-Martino A.R., Warner G.S., Scatena F.N., Civico D.L., 1996. GIS prediction of rainfall and runoff volumes in eastern Puerto Rico. Pages 417-426 in Hallam C.A., J.M. Salisbury, Lanfear K.J., Battaglin W.A., editors. *American Water Resources Association*, Herndon, VA TPS-96-3

Scatena F.N., Moya S., Estrada C., China J.D., 1996. The First Five Years in the Reorganization of Aboveground Biomass and Nutrient Use Following Hurricane Hugo in the Bisley Experimental Watersheds, Luquillo Experimental Forest, Puerto Rico. *Biotropica* Vol 28, #4a: 424-440

Lugo A.E., Scatena F.N. 1996. Background and Catastrophic Mortality in Tropical Moist, Wet, and Rain Forests. *Biotropica* Vol. 28, #4a: 585-599

Scatena F.N., Lugo A.E. 1995. Geomorphology, disturbance, and the soil and vegetation of two subtropical wet steepland watersheds of Puerto Rico. *Geomorphology*, 13:199-213

Scatena F.N., 1995. Relative scales of time and effectiveness of watershed processes in a tropical Montane Rain Forest of Puerto Rico. In *Natural and Anthropogenic Influences in Fluvial Geomorphology*. *American Geophysical Union Geophysical Monograph* 89:103-111

Silver W.L., Scatena F.N., Johnson A.H., Siccama T.G., Sanchez M.J., 1994. Nutrient availability in a montane wet tropical forest in Puerto Rico: spatial patterns and methodological considerations. *Plant and Soil* 164:129-145

Garcia-Montiel, D., Scatena, F.N., 1994. The effect of human activity on the structure and composition of a tropical forest in Puerto Rico. *Forest Ecology and Management*: 63:57-78

Homma A.K.O., Walker R.T., Scatena F.N. 1994. Reducao dos Desmatamentos Na Amazonia: Political Agricol ou Ambiental. *Terceira Conferencia Internacional de Integracao de sistemas*. ICSI94:1-18. Sao Paulo, Brazil

Ahmad, R., Scatena F.N., Gupta A., 1993. Morphology and sedimentation in Caribbean montane streams: examples from Jamaica and Puerto Rico. *Sedimentary Geology* 85:157-169

- Lugo A.E., Scatena F.N., 1992. Epiphytes and Climate Change Research: A Proposal. *Selbenia* 13:123-130
- Basnet K., Scatena F.N., Lugo A.E., and Likens G.E., 1992. Ecological consequence of root grafting in Tabonuco (*Dacryodes excelsa*) trees in the Luquillo Experimental Forest, Puerto Rico. *Biotropica* 25:28-35
- Scatena F.N., Silver W.L., Siccama T. G., Johnson A.G., Sanchez M.J., 1992. Biomass and Chemical content of the Bisley Watersheds, Luquillo Experimental Forest, Puerto Rico. *Biotropica* 25:15-27
- Basnet K., Likens G.E., Scatena F.N., Lugo A.E., 1991. Hurricane Hugo: Damage to a tropical rain forest in Puerto Rico. *Journal of Tropical Ecology* 8:47-55.
- Lodge D.J., Scatena F.N., Asbury C.E., Sanchez M.J. 1991. Fine litter and related nutrient inputs resulting from Hurricane Hugo in Tabonuco and Dwarf Forests of Puerto Rico. *Biotropica* Vol. 23, Number 4: 336-342
- Scatena F.N., Larsen, M.C. 1991. Physical Aspects of Hurricane Hugo in Puerto Rico. *Biotropica* 23, 4a:317-323
- Ackerman J.D., Walker L.R., Scatena F.N., Wunderle J. 1991. Ecological Effects of Hurricanes. *Bull. Ecological Soc. Amer.* 72:178-189
- Scatena F.N. 1990 Culvert Flow in Small Drainages in Montane Tropical Forests: Observations from the Luquillo Experimental Forest of Puerto Rico. In *Tropical Hydrology and Caribbean Water Resources*, American Water Resources Association Technical Publication TPS-90-2 pp 237-246
- Scatena F.N. 1990. Selection of Riparian Buffer Zones in Humid Tropical Steeplands. In R.R. Ziemer, C.L. O'Loughlin, L.S. Hamilton, editors. *Research Needs and Applications to Reduce Erosion and Sedimentation in Tropical Steeplands: IAHS-AISH Pub. No. 192: 328-337*
- Scatena F.N. 1990. Watershed Scale Rainfall Interception on Two Forested Watersheds in the Luquillo Mountains of Puerto Rico. *Journal of Hydrology* 113:89-102
- Scatena F.N., 1987. Recent Sediment Accumulation in a Urban Tidal Embayment, Anacosta Maryland. *Coastal Sediments 1987*. American Society of Civil Engineers Coastal Sediments 1987:100-120
- Brush L.M., Scatena F.N., 1987. River Flood Routing by Nonlinear Muskingum Method, Discussion by Lucien M. Brush. M. ASCE, F.N. Scatena *Journal of the Hydraulics Division, American Soc. Civil Engineers* 1987: 1086-1090
- Coleman D.J. and Scatena F.N. 1986. Identification and evaluation of watershed sediment sources, Drainage Basin Sediment Delivery, International Association of Hydrological Sciences Publication 159: 3-18

## **Books, Chapters, Monographs, Reports**

Scatena F.N. 2006. Editor. Water Quality Trading in the Lower Delaware River Basin: A Resource for Practitioners A Report to the William Penn Foundation. Institute of Environmental Studies University of Pennsylvania. 86 pages

Roman L., Scatena F.N., In Press Tropical Montane cloud forest soils: an overview. In press, Mountains in the Mist: Conserving and Managing Tropical Montane Cloud Forests Symposium Proceedings. August 2004

Holwerda F., Bruijnzeel S, Scatena F.N., In press, Estimating fog deposition in a Puerto Rican cloud forest from (catchment) water budget calculations. In Mountains in the Mist: Conserving and Managing Tropical Montane Cloud Forests Symposium Proceedings. August 2004

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Goodrich D.C., Stakhiv E.Z., Browning-Aiken A., Vache K., Ortiz-Zayas J.R., Blanco J.F., Scatena F.N., Varady R.G., Bowen W.B., Howland W., 2005. The HELP Experience in North America. Proceeding of the ASCE Environmental and Water Resources Institute Water Shed Management Conference, Williamsburg, Va.

Scatena F.N., Planos-Gutierrez E., Schellekens J., 2005 Impacts of natural disturbances on the hydrology of tropical forests. Chapter 19 pages 489-513 in Forest, Water and People in the Humid Tropics. Editors M. Bonell, L.A. Bruijnzeel International Hydrology Series, Cambridge University Press.

Scatena F.N., Review of Environmental Change and Geomorphic Hazards in Forests. 2004 IUFRO Research Series, Volume 9. in The Quarterly Review of Biology Volume 79:99-100

Scatena F.N., Golden C., 2003. The assessment of hydropower development on the Rio Usumacinta of Mexico and Guatemala. Report to World Monument Fund, April 28, 2003. 40 pp.

Wang H.H., Scatena F.N., 2003. Regeneration After Hurricane Disturbance of Big-Leaf and Hybrid Mahogany Plantations in Puerto Rico. Chapter 12 pages 237-260 in Big-Leaf Mahogany: Genetics, Ecology, and Management. A.E. Lugo, J.C. Figuero Colon, M. Alayon, Ecological Studies 159. Springer

Lugo A.E., Scatena F.N., Silver W., Molina-Colon S., Murphy P.G., 2002. Resilience of Tropical Wet and Dry Forests in Puerto Rico. Chapter 8 Pages 195-225 in Resilience and behavior of large-scale systems editors L.H. Gunderson and L. Pritchard Jr. SCOPE Report 60. Island Press

Scatena F.N., Doherty S., Odum H.T., Karecha P. 2002. An EMERGY Evaluation of Puerto Rico and the Luquillo Experimental Forest. USDA Forest Service General Technical Report GTR-9. 79 pages.

Scatena F.N., 2002. Geomorphic hierarchies and the vegetation of humid tropical forests in Latin America. Chapter 1 pages 23-42 in *Ecologia y Conservacion de Bosques Neotropicales*, Editors M.R., Guariguata, G.H., Kattan. Ediciones Libro Universitario Regional.

Scatena F.N., Johnson S.L., 2001 Instream-Flow Analysis for the Luquillo Experimental Forest, Puerto Rico: Methods and Analysis. USDA Forest Service General Technical Report IITF-GTR-11; 30 pages

Lugo A.E., Figueroa Colon J., Scatena F.N., 2000. The Caribbean. Chapter 16 In M.G. Barbour and W.D. Billings editors. *North American Terrestrial Vegetation*. Cambridge University Press England. 530 pages.

Pringle C.M., Scatena F.N., Paaby-Hansen P., Nunez-Ferrera M., 2000. River conservation in Latin America and the Caribbean. Chapter 2 pages 41-78. In P.J. Boon, B. Davies, G.C. Peets editors. *Global perspectives on river conservation: Science, Policy and Practice*. John Wiley and Sons LTD England

Scatena F.N., 2000. Drinking Water Quality. Chapter 2, p 7-25. In *Drinking Water from Forest and Grasslands—A Synthesis of the Scientific Literature*, G. E. Dissmeyer. Editor. USDA Forest Service General Technical Report SRS-39.

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Dallmeier F., Comiskey J.A., Scatena F.N., 1998 Five years of Forest Dynamics following Hurricane Hugo in Puerto Rico's Luquillo Experimental Forest. Chapter 12, pages 231-248 in Forest Biodiversity in North, Central and South America and the Caribbean: Research and Monitoring. F. Dallmeier, J.A. Comiskey editors. Parthenon Press

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