

## Hilary Sigman

Department of Economics  
Rutgers University  
75 Hamilton Street  
New Brunswick, NJ 08901-1248

Fax: (732) 932-7416  
Email: [sigman@econ.rutgers.edu](mailto:sigman@econ.rutgers.edu)  
<http://econweb.rutgers.edu/sigman>

### Current appointments:

Professor, Department of Economics, Rutgers University, New Brunswick, NJ  
Associate Professor (2001-08), Assistant Professor (1999-2001)

Nonresident Fellow, Resources for the Future, Washington, DC (2011-)

Research Associate, National Bureau of Economic Research, Cambridge, MA  
Faculty Research Fellow (1994-2008)

### Education:

1993 Massachusetts Institute of Technology, Ph.D. in Economics  
Thesis: "Economic Instruments for Hazardous Waste Policy"  
National Tax Association Award for Outstanding Doctoral Dissertation

1988 Cambridge University, M.Phil. in Economics

1987 University College of Wales, Aberystwyth, Study in Human and Physical Geography

1986 Yale College, B.A. *summa cum laude*  
Honors in Economics and Studies in the Environment, Phi Beta Kappa

### Visiting and previous positions:

Summer 2007 Visiting Scholar, Copenhagen Business School

Spring 2002 Visiting Associate Professor, Ford School of Public Policy, University of Michigan

1992-98 Assistant Professor, Department of Economics, UCLA

### Fellowships:

Fall 1998 Visiting Fellowship, Hoover Institution, Stanford, CA

1996-1997 Gilbert F. White Fellowship, Resources for the Future, Washington, DC

- Spring 1997 Faculty Research Fellowship, UCLA Center for American Politics and Public Policy
- Fall 1996 UCLA Faculty Career Development Award
- 1990–1992 M.I.T. Center for Energy and Environmental Policy Research, Dissertation funding
- 1988–1990 Robert M. Solow Fellowship
- 1986–1988 Keasbey Memorial Scholarship (for two years' study in the U.K.)

**Professional activities:**

Board of Directors (2003–2005) and Nominating Committee (2007), Association of Environmental and Resource Economists (AERE)

Environmental Economics Advisory Committee (1998–2004) and UST/RCRA Benefits, Costs, and Impacts Review Panel (2002), Science Advisory Board, U.S. Environmental Protection Agency (EPA)

**Research grants and contracts:**

- 2010–2011 World Bank, Knowledge for Change Program (Co-investigator)  
“Damming the Commons: An Analysis of International Cooperation and Conflict over Water”
- 2005–2009 U.S. EPA, National Center for Environmental Research,  
Science to Achieve Results (STAR) Research Grant, \$149,237 (P.I.)  
“Environmental liability, cleanup expenditures, and redevelopment of old industrial land”
- 1999–2003 National Science Foundation, Research Grant, \$137,792 (P.I.)  
“International spillovers and water quality in rivers”
- 1994–1997 U.S. EPA, Office of Exploratory Research, Research Grant, \$218,805 (P.I.)  
“Liability funding and Superfund clean-up strategies”
- 1994–1995 University of California Toxic Substances Research and Teaching Program,  
Research Grant \$19,200 (P.I.)  
“Cross-media substitution in toxic chemical emissions”
- 1993 Marine Policy Center, Woods Hole Oceanographic Institution,  
Subcontract for Focal Study, “The cost of waste reduction”

## **Publications:**

“Monitoring and Enforcement of Climate Policy” in Don Fullerton and Catherine Wolfram, eds. *The Design and Implementation of U.S. Climate Policy* (Chicago: University of Chicago Press, forthcoming 2011).

“Management of Hazardous Waste and Contaminated Land” (with Sarah Stafford) *Annual Review of Resource Economics* 3 (forthcoming 2011).

“The Effect of Allowing Pollution Offsets with Imperfect Enforcement” (with Howard F. Chang) *American Economic Review (Papers and Proceedings)* 101 (May 2011), 268–72.

“Environmental Liability and Redevelopment of Old Industrial Land,” *Journal of Law and Economics* 53 (May 2010), 289–306.

“Implications of Globalization and Trade for Water Quality in Transboundary Rivers” (with Howard F. Chang) in Claudia Ringler, Asit Biswas, and Sarah Cline, eds. *Global Change: Impacts on Water and Food Security* (New York: Springer, 2010), pp. 97–111.

*Economics of Hazardous Waste and Contaminated Land*. Cheltenham, UK: Edward Elgar, 2008 (edited volume in International Library of Critical Writings in Economics).

“Economics of Hazardous Waste,” in Steven N. Durlauf and Lawrence E. Blume, eds. *The New Palgrave Dictionary of Economics, 2nd edition* (Basingstoke and New York: Palgrave Macmillan, 2008).

“A Cross-Country Comparison of Decentralization and Environmental Protection,” in Greg Ingram and Yu-Hung Hong, eds. *Land Policies and Fiscal Decentralization* (Cambridge, MA: The Lincoln Institute for Land Policy, 2008), 195–215.

“The Effect of Joint and Several Liability under Superfund on Brownfields,” (with Howard F. Chang), *International Review of Law and Economics* 27 (December 2007), 363–384.

“Legal Liability as Climate Change Policy,” *University of Pennsylvania Law Review* 155 (June 2007), 1953–1959.

“The Incidence of Pollution Control Policies” (with Ian W.H. Parry, Margaret Walls, and Roberton C. Williams III) in Tom Tietenberg and Henk Folmer, eds. *International Yearbook of Environmental and Resource Economics 2006/2007* (Cheltenham, UK: Edward Elgar, 2006), 1–44.

“Transboundary Spillovers and Decentralization of Environmental Policies,” *Journal of Environmental Economics and Management* 50 (June 2005), 82–101.

- “Does Trade Promote Environmental Coordination? Pollution in International Rivers,” *Contributions to Economic Analysis and Policy*, 3 (Issue 2, 2004), Article 2. (reprinted in D. Fullerton, ed., *The Economics of Pollution Havens*, Cheltenham, UK: Edward Elgar, 2006; and K.W. Easter and N. Zeitouni, eds. *Economics of Water Quality*, Ashgate Publishing, 2007).
- “Targeting Lead in Solid Waste,” in Nils Axel Braathen, ed. *Addressing the Economics of Waste* (Paris: OECD, 2004), 161–180.
- “Taxes on Hazardous Waste: The U.S. Experience,” *Public Finance and Management* 3(1), 2003, 12–33.
- “Letting the States Do the Dirty Work: State Responsibility for Federal Environmental Regulation,” *National Tax Journal* 56 (March 2003), 107–122.
- “International Spillovers and Water Quality in Rivers: Do Countries Free Ride?” *American Economic Review* 92 (September 2002), 1152–1159 (reprinted in J. Geoghegan and W. Gray, eds., *Spatial Aspects of Environmental Policy*, Ashgate Publishing, 2006).
- “The Pace of Progress at Superfund Sites: Policy Goals and Interest Group Influence,” *Journal of Law and Economics*, 44 (April 2001), 315–44 (reprinted in Geoghegan and Gray, as above).
- “Environmental Liability in Practice: Liability for Cleanup of Contaminated Sites under Superfund,” in Anthony Heyes, ed. *The Law and Economics of the Environment*, (Cheltenham, U.K.: Edward Elgar, 2001), 136–149.
- “Hazardous Waste and Toxic Substance Policies,” in Paul R. Portney and Robert N. Stavins, eds. *Public Policies for Environmental Protection*, Second Edition (Washington, DC: Resources for the Future, 2000), 215–260.
- “Incentives to Settle Under Joint and Several Liability: An Empirical Analysis of Superfund Litigation” (with Howard F. Chang), *Journal of Legal Studies* 29 (January 2000), 205–236.
- “Reforming Hazardous Waste Policy,” Hoover Institution Essays in Public Policy (Stanford, CA: Hoover Institution, 1999).
- “Liability Funding and Superfund Clean-Up Remedies,” *Journal of Environmental Economics and Management* 35 (May 1998), 205–224.
- “Midnight Dumping: Public Policies and Illegal Disposal of Used Oil,” *RAND Journal of Economics* 29 (Spring 1998), 157–178.
- “The Cost of Reducing Municipal Solid Waste” (with Karen Palmer and Margaret Walls), *Journal of Environmental Economics and Management* 33 (June 1997), 128–150. (Reprinted in T. Kinnaman, *The Economics of Residential Solid Waste Management*, Ashgate Publishing,

2003 and R.K. Turner, I. Bateman, and J. Powell, eds. *Waste Management and Planning*, Edward Elgar, 2001.)

“Cross-Media Pollution: Responses to Restrictions on Chlorinated Solvent Releases,” *Land Economics* 72 (August 1996), 298–312.

“The Effects of Hazardous Waste Taxes on Waste Generation and Disposal,” *Journal of Environmental Economics and Management* 30 (March 1996), 199–217.

“A Comparison of Public Policies for Lead Recycling,” *RAND Journal of Economics* 26 (Autumn 1995), 452–478.

**Working papers and work in progress:**

“An Empirical Analysis of Cost Recovery in Superfund Cases: Implications for Brownfields and Joint and Several Liability” (with Howard F. Chang), NBER Working Paper 16209 (under revision). Summarized in *NBER Digest*, December 2010.

“Decentralization and Environmental Quality: An International Analysis of Water Pollution,” NBER Working Paper 13098 (under submission).

“Voluntary Decentralization in Environmental Policy: ‘Cooperative Federalism’ as a Strategic Interaction” (with Leah Traub), NBER Working Paper 13238.

“The Lay of the Contaminated Land: The Prevalence and Location of Brownfields” (with Minkyung Yoo), work in progress.

**Book reviews, proceedings, and other works:**

“Comments on ‘Distributional Aspects of a Comprehensive Climate Policy’ by Metcalf et al.” in Fullerton and Wolfram, eds. (cited above, forthcoming 2011).

“Members’ Responses to the Survey on the AERE Journal Proposal,” *AERE Newsletter*, 2004.

“Review of *The Economics of Waste* by Richard C. Porter,” *Journal of Economic Literature* 42 (March 2004), 229–31.

“Review of *The Greening of Industry: A Risk Management Perspective* by John Graham and Jennifer Hartwell,” *Journal of Economic Literature*, 36 (June 1998), 996–998.

“Economic Instruments for Hazardous Waste Policy,” and “An Empirical Assessment of State Hazardous Waste Taxes,” *Proceedings of the National Tax Association*, vol. 86, 1994.

“State Hazardous Waste Fees: An Assessment,” *New Partnerships: Economic Incentives in Environmental Management*, Pittsburgh: Air and Waste Management Association, 1994.

**Reviewing and related activities:**

1997–2004 Editorial Council, *Journal of Environmental Economics and Management*  
2003– Editorial Council, *Public Finance Review*  
2003 Co-organizer, NBER Summer Institute Environmental Economics and Policy Workshop

Reviewer for:

Journals: *American Economic Review*, *B.E. Press Journal of Applied Economics and Policy*, *Canadian Journal of Economics*, *Contemporary Economic Policy*, *Ecological Economics*, *Economic Inquiry*, *Economic Journal*, *Energy Journal*, *Environmental and Resource Economics*, *Environment and Planning A*, *Finnish Economic Papers*, *International Tax and Public Finance*, *Journal of Economic Literature*, *Journal of Environmental Economics and Management*, *Journal of Environmental Management*, *Journal of Industrial Economics*, *Journal of Law and Economics*, *Journal of Law, Economics and Organization*, *Journal of Policy Analysis and Management*, *Journal of Public Economics*, *Land Economics*, *National Tax Journal*, *Policy Studies Review*, *Public Finance Quarterly*, *Quarterly Journal of Economics*, *RAND Journal of Economics*, *Regional Studies and Urban Economics*, *Resource and Energy Economics*, *Review of Economics and Statistics*, *Review of Environmental Economics and Policy*, *Review of Law and Economics*, *Southern Economic Journal*

Granting Organizations: National Science Foundation, Social Science and Humanities Research Council of Canada, Czech Research Foundation, University of California Energy Institute

Conference Selection Committees: 2011 AERE Annual Meeting, 2011 EAERE Annual Meeting, 2010 and 2006 World Congresses of the Environmental and Resource Economists, 1999 AERE-Harvard Workshop on Market Mechanisms

Other: National Research Council, Edward Elgar, Addison-Wesley, NTA Dissertation Awards

**Presentations** (since 2001):

University of California, Santa Barbara Department of Economics, October 2011 (scheduled)  
Society for Environmental Law and Economics, Amsterdam, June 2011  
American Economic Association Annual Meeting, Denver, January 2011  
Association for Public Policy Analysis and Management Annual Meeting, Boston, Nov. 2010  
World Congress of Environmental and Resource Economists IV, Montreal, June 2010  
NBER Conference, “The Design of U.S. Climate Policy,” Washington, DC, May 2010  
Conference on Empirical Legal Studies, Los Angeles, November 2009  
Latin American and Caribbean Law and Econ Association Annual Meeting, Barcelona, June 2009  
Yale University, Environmental Economics Workshop, April 2009  
Fordham University, Department of Economics, October 2008

Conference on Empirical Legal Studies, New York, November 2007  
Copenhagen Business School, Denmark, August 2007  
Lincoln Institute for Land Policy, Symposium on Fiscal Decentralization, June 2007  
EPA Market Mechanisms and Incentives Workshop, Washington, DC, October 2006  
World Congress of Environmental and Resource Economics III, Kyoto, Japan, July 2006  
NBER Environmental Working Group Meeting, April 2006  
National Brownfields Association Annual Meeting, Denver, November 2005  
New Jersey Department of Environmental Protection, Trenton, June 2005  
Yale Environmental Economics Workshop, May 2005  
International Food Policy Research Institute Workshop, Costa Rica, April 2005  
Harvard-MIT Joint Environmental Economics and Policy Workshop, March 2005  
OECD Workshop, "The Economics on Waste," Paris, October 2003  
RCRA National Meeting, Washington, DC, August 2003  
Hunter College, Department of Economics, May 2003  
World Congress of Environmental and Resource Economics II, Monterey, CA, June 2002  
NBER Conference on Advances in Empirical Environmental Economics, May 2002  
NBER Environmental Working Group Meeting, April 2002  
University of Michigan, Department of Economics, March 2002  
Columbia University, Business School, March 2001  
Georgetown University, Department of Economics, March 2001  
George Mason University, Institute for Public Choice, February 2001

**Recent teaching:**

Environmental Economics (Economics 332; 70–85 students): S 2003, S 2004, F 2004, S 2005, F 2005; S 2006, F 2006, F 2007, F 2008, S 2009, F 2009, S 2010

Industrial Organization (Economics 341; 75–90 students): S 2003, S 2004, F 2004, F 2005, F 2006, F 2007, F 2008

Applied Econometrics for Microeconomics (Economics 509, 5-13 Ph.D. students): F 2009, S 2011

Public Economics (Economics 515; 4-5 Ph.D. students): S 2008, S 2011

**Recent university service:**

Coordinator, Empirical Microeconomics Workshop, 2006-10, 2011-12

Executive Committee, Department of Economics, 2008-2010

Graduation Education Committee and Graduate Admissions Committee, 2009-present

Executive Committee, Graduate School-New Brunswick, 2009-2012

Board, Rutgers Energy Institute, 2009-present

Associated Faculty, Rutgers-NSF IGERT on Sustainable Fuel Solutions, 2009-present