

PROFESSIONAL EXPERIENCE

DIRECTOR, INSTITUTE OF PUBLIC UTILITIES POLICY RESEARCH AND EDUCATION, MICHIGAN STATE UNIVERSITY.

April 2002 to present. The Institute of Public Utilities supports informed, effective, and efficient regulation of the infrastructure-intensive network industries that provide essential utility services – electricity, natural gas, water, and telecommunications. IPU fulfills its mission by providing to the regulatory policy community integrative, interdisciplinary, and balanced educational programs and applied research on the institutions, theory, and practice of modern economic regulation. The Institute's pedagogical practice is neutral, analytical, and informed by traditional and applied academic disciplines, including law, business, engineering, communications, and the social sciences. The Institute was established in 1965 and operates as a self-supporting unit in the College of Social Science at Michigan State University. IPU endeavors to advance a principled approach to regulation, an empirical approach to regulatory analysis, and a reasoned approach to structural and regulatory change and the integration of regulation and markets. As Director, Dr. Beecher designs the curricula, selects program faculty, manages operations, and lectures for the Institute's nationally and internationally recognized educational programs and is responsible for all aspects of institutional development and funding, marketing and communications, and applied research activities. Dr. Beecher teaches seminars in the theory and practice of regulation, as well as special topics in regulatory policy, and facilitates executive, strategic planning, and other participatory forums.

ADJUNCT APPOINTMENTS. Department of Political Science (2003 to present), Economics (2006 to present), and College of Law (2005-2006), Michigan State University.

PRINCIPAL, BEECHER POLICY RESEARCH, INC. April 1998 to April 2002. Principal of an independent consulting firm with a mission to conduct high-quality policy research for the public and private sectors, provide practical public policy data and decisionmaking tools, and promote sound public policymaking processes and informed public policy choices. Conducted policy analysis, surveys, comparative studies, and social research related to public utilities, specializing in the structure and regulation of the water industry, water pricing and affordability, and integrated planning. Projects included research and consulting for the U.S. Environmental Protection Agency, the National Association of Water Companies, and the American Water Works Association Research Foundation. Advised and consulted with federal and state regulators and policymakers, professional associations, university researchers, consultants, utility managers, and others. Actively involved in national associations related to regulatory and water utility issues.

SENIOR RESEARCH SCIENTIST AND DIRECTOR OF REGULATORY STUDIES. Center for Urban Policy and the Environment, School of Public and Environmental Affairs, Indiana University, Indianapolis, Indiana. April 1995 to June 1998. Principal investigator and analyst for research related to the structure and regulation of the water utility industry. Responsible for the program's research agenda, funding and development, and survey and clearinghouse functions.

ADJUNCT PROFESSOR. School of Public and Environmental Affairs, Indiana University, Indianapolis, Indiana. August 1995 to June 1998. Taught graduate and undergraduate courses in public policy,

including a course on privatization. Special adjunct faculty appointment at Southern Illinois University for graduate student committee. Faculty of the Institute of Public Utilities, Michigan State for water programs.

SENIOR INSTITUTE RESEARCH SPECIALIST. The National Regulatory Research Institute, The Ohio State University. Columbus, Ohio. November 1988 to March 1995. Principal project manager and regulatory analyst for water utility research; assisted in setting the research agenda, funding and grant development, and external relations; member of the staff subcommittee of the National Association of Regulatory Utility Commissioners (NARUC) Water Committee; liaison to state commissioners and staff, federal agencies, university faculty, professional associations, and others interested in water utility and regulatory issues; organizer and moderator for the Water Policy Forum at the Biennial Regulatory Information Conference; and instructor for new commissioner tutorial and other educational programs. Recipient of the 1991 Board of Directors award for excellence; honored by a NARUC resolution in 1995.

ADJUNCT ASSOCIATE PROFESSOR. School of Public Policy and Management, The Ohio State University. Columbus, Ohio. February 1994 to April 1995. Taught two graduate-level public policy courses, served as a faculty and research advisor to graduate students; sat on graduate student committees; and participated in faculty colloquia.

EXECUTIVE ASSISTANT TO THE CHAIRMAN. Illinois Commerce Commission. Chicago, Illinois. November 1983 to October 1988. Principal policy analyst, project coordinator, and advisor to the Chairman on matters of administration, legislation, and regulatory policy affecting the electricity, gas, telecommunications, transportation, and water industries; Chairman's liaison to other commissioners, the executive director and division managers, state and federal agencies, the National Association of Regulatory Utility Commissioners, the media, and the general public; author of numerous policy memoranda and speeches.

ASSOCIATE INVESTIGATOR. Study of the Precision of Environmental Impact Assessment, funded by the National Science Foundation. Center for Urban Affairs & Policy Research, Northwestern University, 1982 to 1983. Provided project management with primary responsibility for sample selection and coding, planned field research, interviewed knowledgeable informants and collected data, assisted in data management and statistical analysis, conducted investigation of policy implementation and non-implementation, and coauthored a book serving as the project's final report.

RESEARCH ASSOCIATE. Governmental Responses to Crime Project, funded by the National Institute of Justice. Center for Urban Affairs & Policy Research, Northwestern University, 1980 to 1982. Interviewed knowledgeable informants, collected and managed data, and coauthored final report on political responses to crime in American cities.

RESEARCH ASSOCIATE. Wind Energy Research Project, funded by the Solar Energy Research Institute. Center for Urban Affairs & Policy Research, Northwestern University, 1980. Designed and conducted field research and coauthored final research report.

RESEARCH ASSOCIATE. Illinois Sunset Review Project, funded by the Illinois General Assembly.
Department of Political Science, University of Illinois at Chicago, 1980. Researched federal impacts on state licensure and coauthored final report to the Illinois legislature.

TEACHING ASSISTANT. Department of Political Science, Northwestern University, 1980. Courses in the American presidency and law and politics.

BANKING. Elmhurst Federal Savings and Loan and Elmhurst National Bank, Illinois. 1974 to 1979.

EDUCATION

PH.D. NORTHWESTERN UNIVERSITY. Political Science. August 1986.
Fields: Public Policy (major), Political Behavior & Institutions, Law & Politics, Urban Politics.
Dissertation: "Uncertain by Design: A Structural Theory of Regulation by the State Public Utility Commissions."

M.A. NORTHWESTERN UNIVERSITY. Political Science. August 1980.
M.A. Thesis: "When Governments Intervene: The Adoption of Regulatory Policy in the American States."

B.A. ELMHURST COLLEGE. Economics, Political Science, and History. June 1979.
Graduated with highest honors.
Phi Kappa Phi (the college's ranking scholastic honors society).

SCHOLARSHIPS

Northwestern University Scholarship, 1982-1983.
Northwestern University, Center for Urban Affairs & Policy Research Fellowship,
1981-1982 and 1980-1981.
Northwestern University Fellowship, 1979-1980.
Elmhurst College Freshman Scholar, 1977-1978.

PUBLICATIONS

"Utility Regulation," Forthcoming in *Governing America* by Paul Quirk & William Cunion (Facts on File, forthcoming in 2009).

"Water Pricing and the Cost of Service in the United States," A Paper Prepared for the Organization for Economic Development and Co-operation (April 2009).

"Private Water and Economic Regulation in the United States," Forthcoming in Handbook in Utility Management (Jacobs University, 2009).

"The Prudent Regulator: Politics, Independence, Ethics, and the Public Interest," Energy Law Journal 29: 2 (November 2008).

"Water Efficiency Programs for Integrated Water Management" (Thomas W. Chesnutt, et al.). American Water Works Association Journal (May 2008).

Water Efficiency Programs for Integrated Water Management (Thomas W. Chesnutt, et al.). Denver, CO: American Water Works Research Foundation, 2007. 225 pp.

Sourcebook of Regulatory Techniques for Water Utilities. Washington, DC: National Association of Water Companies, 1997, 1999, 2003, and 2006. Electronic database.

Utility Rate Structures; Investigating International Principles and Customer Views (Hudson Bell, et al.). Denver, CO: American Water Works Research Foundation, 2005.

"Achieving Sustainable Water Systems," in Drinking Water Regulations and Health. Fred Pontius, ed. New York: John Wiley and Sons, 2003.

Economic Regulation of Public Utilities: An Introduction and Overview. Institute of Public Utilities, Michigan State University, February 2003.

Privatization of Water Services in the United States. Washington, DC: National Research Council, National Academy of Sciences, 2002. Authored by the Committee on Privatization of Water Services in the United States. 145 pp.

"Commissions on a Mission: The Emergent Regulatory Paradigm." LEAP Letter (September-October, 2002).

"Strategic Planning for Small Water Systems" (Peter E. Shanaghan and Janice A. Beecher) in Urban Water Supply Handbook. Larry W. Mays, ed. New York: McGraw-Hill, 2002.

"The Infrastructure Gap: Myth, Reality, and Strategies," in Assessing the Future: Water Utility Infrastructure Management. Denver, CO: American Water Works Association, 2002.

Economic Regulation of Water Utilities: A Primer. Washington, DC: National Association of Water Companies, 2001. 36 pp.

Value, Structure, and Regulation: Select Issues Affecting the Water Industry. Pre-Conference Discussion Paper for the 2002 National Drinking Water Symposium. Washington, DC: National Association of Water Companies, 2001.

“Privatization, Monopoly, and Structured Competition in the Water Industry: Is there a Role for Regulation,” in *Excellence in Action: Water Utility Management in the 21st Century*. Denver, CO: American Water Works Association, 2001.

“The Ethics of Water Privatization,” in *Navigating Rough Waters: Ethical Issues in the Water Industry*. Cheryl Davis, ed. Denver, CO: American Water Works Association, 2001.

“A Dozen Mega-Trends in the Water Sector,” *Utility Business* (October 2001).

“Institutional Alternatives for the 21st Century” (Peter E. Shanaghan and Janice A. Beecher). *Proceedings of the Annual Conference of the American Water Works Association*. Denver, CO: American Water Works Association, 2001.

“Survey of State Agency Water Loss Reporting Practices: Preliminary Findings” (George Kunkel and Janice A. Beecher). *Proceedings of the Annual Conference of the American Water Works Association*. Denver, CO: American Water Works Association, 2001.

“Ten Practices of Highly Effective Water Utilities” (Janice A. Beecher and Scott J. Rubin). *Opflow* (April 2001).

“Strategic Compliance Planning for Small Systems” (Peter Shanaghan and Janice A. Beecher). *Opflow* (January 2001).

The Changing Utility Environment: Impact on the Water Industry and Issues for Economic Regulators. Discussion Paper and Summary Report for the 2000 NAWC Water Policy Forum. Washington, DC: National Association of Water Companies, 2000.

Deregulation! Impacts on the Water Industry (Janice A. Beecher and Scott J. Rubin). Denver, CO: American Water Works Research Foundation, 2000. 299 pp.

Socioeconomic Impacts of Water Conservation (Janice A. Beecher, Thomas W. Chesnutt, and David M. Pekelney). Denver, CO: American Water Works Research Foundation, 2000. 188 pp.

“The Rationale for Regulating Municipal Contract Services,” *Public Works Financing* (November 2000).

“Privatization, Monopoly, and Structured Competition in the Water Industry: Is There A Role For Regulation?” *Water Resources Update* (October 2000).

Report of the National Drinking Water Advisory Council (NDWAC) Small Systems Implementation Working Group (Beecher Policy Research, Inc. and The Cadmus Group, Inc.). Summer 2000.

- “Impacts of Deregulation on the Water Industry” (Janice A. Beecher and Scott J. Rubin). Proceedings of the Annual Conference of the American Water Works Association. Denver, CO: American Water Works Association, 2000.
- “Implications of Deregulation.” American Water Works Association Journal (January 2000).
- Consolidated Water Rates: Issues and Practices in Single-Tariff Pricing. Washington, DC: U.S. Environmental Protection Agency, December 1999. 110 pp.
- Regulatory Incentives for Consolidation: The Public Utility Commission Role in Restructuring the Water Industry. Discussion Paper and Summary Report for the 1999 NAWC Water Policy Forum. Washington, DC: National Association of Water Companies, 1999.
- “The Role of Utility Regulation in Water and Wastewater Privatization.” America’s Water and Wastewater Industries: Competition and Privatization. Paul Seidenstadt, Michael Nadol, and Simon Hakim, eds. Arlington, VA: Public Utilities Reports, 1999.
- “Sustainable Water Pricing” (Janice A. Beecher and Peter E. Shanaghan). Water Resources Update (Winter 1999).
- “Privatization, Monopoly, and Structured Competition in the Water Industry: Is There A Role For Regulation?” Proceedings of the Annual Conference of the American Water Works Association. Denver, CO: American Water Works Association, 1999.
- “Sustainable Water Pricing” (Janice A. Beecher and Peter E. Shanaghan). Proceedings of the Annual Conference of the American Water Works Association. Denver, CO: American Water Works Association, 1999.
- “Water Accountability and The EPA Water Conservation Plan Guidelines” (Janice A. Beecher and John E. Flowers). Proceedings of the Annual Conference of the American Water Works Association. Denver, CO: American Water Works Association, 1999.
- “Equity, Fairness, and Conservation Rates” (Patrick C. Mann and Janice A. Beecher). Proceedings of Conserv99. Denver, CO: American Water Works Association, 1999.
- “EPA’s Planning Guidelines: Raising the Bar” (John E. Flowers and Janice A. Beecher). Proceedings of Conserv99. Denver, CO: American Water Works Association, 1999.
- Water Conservation Plan Guidelines. Prepared for the Environmental Protection Agency pursuant to the 1996 Amendments to the Safe Drinking Water Act, August 1998.

The Water Industry Compared: Structural, Regulatory, and Strategic Issues for Utilities in a Changing Context. A report prepared for the National Association of Water Companies. Washington, DC: NAWC, 1998.

National-Level Affordability Criteria under the 1996 Amendments to the Safe Drinking Water Act (International Consultants, Inc., Hagler Bailly Services, Inc. and Janice A. Beecher). A Report to the Office of Groundwater and Drinking Water, U.S. Environmental Protection Agency, 1998.

"The 1996 Safe Drinking Water Act and Structural Change in the Water Industry." Proceedings of the Annual Conference of the American Water Works Association. Denver, CO: American Water Works Association, 1998.

"Efficiency and Profitability: Conservation Incentives for Investor-Owned Utilities" (Janice A. Beecher, Thomas W. Chesnutt, and Patrick C. Mann). Proceedings of the Annual Conference of the American Water Works Association. Denver, CO: American Water Works Association, 1998.

"Implementing Water Conservation Rates" (Janice A. Beecher and Thomas W. Chesnutt). Proceedings of the Annual Conference of the American Water Works Association. Denver, CO: American Water Works Association, 1998.

"Affordability Provisions of the 1996 SDWA" (Janice A. Beecher and Ian P. Kline). Proceedings of the Annual Conference of the American Water Works Association. Denver, CO: American Water Works Association, 1998.

"Affordability and Drinking Water: Provisions of the 1996 SDWA" (Janice A. Beecher and Peter Shanaghan). American Water Works Association Journal (May 1998).

"Water Conservation and the 1996 SDWA" (Janice A. Beecher and John D. Flowers). American Water Works Association Journal (May 1998).

"Small System Capacity and the 1996 SDWA" (Peter Shanaghan, Ian Kline, John Cromwell and Janice A. Beecher). American Water Works Association Journal (May 1998).

"Energy Deregulation" (Janice A. Beecher, et al.). AWWA Roundtable. American Water Works Association Journal (April 1998).

"Conservation Rates in the Real World" (Thomas W. Chesnutt and Janice A. Beecher). American Water Works Association Journal 90, 2 (February 1998). Divisional best paper award.

"Twenty-One Myths About Privatization (and Counting)." NAWC Water 38, 3 (1998).

- "The Role of Demand Management in Integrated Resource Planning," in *Urban Water Demand Management and Planning*. Duane D. Baumann, John J. Boland, and W. Michael Hanemann, eds., New York: McGraw Hill, 1998.
- Customer-Focused Service: Responsiveness and Change in the Water Industry. Discussion Paper and Summary Report for the 1997 NAWC Water Policy Forum. Indianapolis, IN: Center for Urban Policy and the Environment, 1997
- "Real Water Rates on the Rise" (Janice A. Beecher and Patrick C. Mann). *Public Utilities Fortnightly* (July 1997).
- "To Privatize or Not to Privatize" (G. Richard Dreese and Janice A. Beecher). *Indian Water Works Association* (July 1997).
- "United States: Water." *Utility Regulation 1997*. London: Privatization International, 1997.
- "Water Utility Privatization and Regulation: Lessons from the Global Experiment," *Water International* (March 1997).
- The Regionalization of Water Utilities: Perspectives, Issues, and Annotated Bibliography*. Columbus, OH: The National Regulatory Research Institute, 1996. 149 pp.
- Handbook for Designing, Evaluating, and Implementing Conservation Rate Structures* (Thomas W. Chesnutt, et al.). Los Angeles, CA: The California Urban Water Conservation Council, 1996.
- Discussion Paper for the 1996 NAWC Water Policy Forum. Prepared for the National Association of Water Companies (NAWC). Indianapolis, IN: Center for Urban Policy and the Environment, 1996.
- Issue Editor for special issue on Integrated Resource Planning, *Water Resources Update* 104 (Summer 1996).
- "Avoided Cost: An Essential Concept for Integrated Resource Planning," *Water Resources Update* 104 (Summer 1996).
- "Putting the Pieces Together: Integrating Water Resources in IRP" (Thomas W. Chesnutt, Casey McSpadden, and Janice A. Beecher). *Proceedings of the Annual Conference of the American Water Works Association*. Denver, CO: American Water Works Association, 1996.
- "Incremental and Average Cost Methods in Rate Design," (Patrick C. Mann and Janice A. Beecher). *American Water Works Association Journal* 88, 6 (June 1996).
- "The Role of Price in Water Conservation: Evidence and Issues" (Janice A. Beecher and Patrick C. Mann) *Proceedings of Conserv96*. Denver, CO: American Water Works Association, 1996.

"Handbook for Designing, Evaluating, and Implementing Conservation Rates" (Thomas W. Chesnutt, et al.). Proceedings of Conserv96. Denver, CO: American Water Works Association, 1996.

"Public-Private Partnerships for Providing Water Service" (Janice A. Beecher, et al.). AWWA Roundtable. American Water Works Association Journal 88, 4 (April 1996).

Study Guide to accompany Karen O'Connor and Larry Sabato's American Government: Roots and Reform. New York: Macmillan, 1993, 1995, and 1996 editions. Instructor's Manual and Test Bank, 1993 edition.

1995 Inventory of Commission-Regulated Water and Wastewater Utilities. Indianapolis, IN: Center for Urban Policy and the Environment, 1995.

Discussion Paper for the 1995 NAWC Water Policy Forum. Prepared for the National Association of Water Companies (NAWC). Indianapolis, IN: Center for Urban Policy and the Environment, 1995.

Survey of Eastern Water Law (Paul G. Foran, Janice A. Beecher, and Larry J. Wilson). A Report to the Illinois Department of Natural Resources, 1995, 112pp.

Regulatory Implications of Water and Wastewater Utility Privatization (Janice A. Beecher, G. Richard Dreese, and John D. Stanford). Columbus, OH: The National Regulatory Research Institute, 1995. 271 pp.

Alternatives to Utility Service Disconnection (Robert E. Burns, Janice A. Beecher, et al.) Columbus, OH: The National Regulatory Research Institute, 1995. 168 pp.

"Integrated Resource Planning Fundamentals," American Water Works Association Journal 87, 6 (June 1995). Selected as the best 1995 Journal article by the AWWA Water Resources Division.

"PUC 2000: The Water Utility Industry," NAWC Water (Summer 1995).

"Regulatory Alternatives for Water Utilities: A Comprehensive Framework." National Regulatory Research Institute Quarterly Bulletin 16, 1 (March 1995): 103-119.

Revenue Effects of Water Conservation and Conservation Pricing: Issues and Practices (Janice A. Beecher, et al.). Columbus, OH: The National Regulatory Research Institute, September 1994. 241 pp.

"Water Affordability and Alternatives to Service Disconnection." American Water Works Association Journal 86, 10 (October 1994): 61-72.

- "NRRI Survey on Water Conservation and Conservation Pricing," Proceedings of the NRRI Biennial Regulatory Information Conference. Columbus, OH: The National Regulatory Research Institute (September 1994).
- "Financial Distress Assessment Models for Small Water Utilities" (G. Richard Dreese and Janice A. Beecher) Proceedings of the Annual Conference of the American Water Works Association. Denver, CO: American Water Works Association, 1994.
- Meeting Water Utility Revenue Requirements: Financing and Ratemaking Alternatives (Janice A. Beecher and Patrick C. Mann). Columbus, OH: The National Regulatory Research Institute, November 1993. 271 pp.
- "IRP: An Open Planning Process" (Janice A. Beecher, et al.). AWWA Roundtable. American Water Works Association Journal 85, 8 (August 1993): 26-34.
- "Developing Models for Assessing the Financial Health of Small and Medium-Size Water Utilities" (G. Richard Dreese and Janice A. Beecher). American Water Works Association Journal 85, 6 (June 1993): 54-60.
- Test Bank to accompany Empty Dreams, Empty Pockets. New York, Macmillan, 1993.
- "Financial Distress Assessment Models for Small Water Utilities" (G. Richard Dreese and Janice A. Beecher). Proceedings of the NRRI Biennial Regulatory Information Conference. Columbus, OH: The National Regulatory Research Institute, September 1992.
- "Enhanced Regulatory Decisionmaking Through Integrated Water Resource Planning." Proceedings of the NRRI Biennial Regulatory Information Conference. Columbus, OH: The National Regulatory Research Institute, September 1992.
- Viability Policies and Assessment Methods for Small Water Utilities (Janice A. Beecher and G. Richard Dreese). Columbus, OH: The National Regulatory Research Institute, June 1992. 276 pp.
- 1992 NRRI Survey on Commission Ratemaking Practices for Water Utilities (Janice A. Beecher and Nancy N. Zearfoss). Columbus, OH: The National Regulatory Research Institute, May 1992. 71 pp.
- Integrated Resource Planning for Water Utilities (Janice A. Beecher, James R. Landers, and Patrick C. Mann). Columbus, OH: The National Regulatory Research Institute, October 1991. 303 pp.
- Cost Allocation and Rate Design for Water Utilities (Janice A. Beecher and Patrick C. Mann). Columbus, OH: The National Regulatory Research Institute, December 1990. Also published by the American Water Works Association Research Foundation. 210 pp.

- "Marginal Cost Pricing Theory Applied to Water Utilities" (Patrick C. Mann and Janice A. Beecher).
Proceedings of the NRRI Biennial Regulatory Information Conference. Columbus, OH: The National
Regulatory Research Institute, September 1990.
- "Value, Cost, and Price: Essay on Emerging Water Utility Issues." National Regulatory Research Institute
Quarterly Bulletin (June 1990). Also published in NAWC Water (Summer 1990).
- Deregulation and Regulatory Alternatives for Water Utilities (Janice A. Beecher and Patrick C. Mann).
Columbus, OH: The National Regulatory Research Institute, March 1990. 125 pp.
- Compendium on Water Supply and Conservation (Janice A. Beecher and Ann P. Laubach). Columbus,
OH: The National Regulatory Research Institute, October 1989. 388 pp.
- Study Guide to accompany Robert L. Lineberry's Government in America. Boston: Scott, Foresman/Little,
Brown, 1983, 1986 and 1989 editions.
- "Applied Political Science: Bridging the Gap or a Bridge Too Far?" (Gary J. Andres and Janice A.
Beecher). PS: Political Science & Politics (September 1989).
- 1989 Survey on State Commission Regulation of Water and Sewer Systems (Janice A. Beecher and Ann.
P. Laubach). Columbus, OH: The National Regulatory Research Institute, May 1989.
- Cost Impact of Safe Drinking Water Act Compliance for Commission-Regulated Water Utilities (Patrick C.
Mann and Janice A. Beecher). Columbus, OH: The National Regulatory Research Institute, May
1989. 97 pp.
- Forecasts and Environmental Decisionmaking: The Content and Predictive Accuracy of Environmental
Impact Statements (Paul J. Culhane, H. Paul Friesema, and Janice A. Beecher). Boulder, CO:
Westview Press, 1987. 306 pp.
- Instructor's Manual to accompany Robert L. Lineberry's Government in America. (Janice A. Beecher, et
al.) Boston: Little, Brown, 1986 edition.
- The Precision of Environmental Impact Assessment: Implementation Status and Sample Selection (Paul J.
Culhane, H. Paul Friesema, and Janice A. Beecher). CUAPR Working Paper Series. Evanston, IL:
Center for Urban Affairs & Policy Research, September 1982.
- "Keeping Pace: Court Resources and Crime in Ten U.S. Cities" (Herbert Jacob, Dwayne Swank, Michael J.
Rich, and Janice A. Beecher). *Judicature* 66 (August 1982): 73-83.
- "Attentiveness to Crime in Political Arenas" (Janice A. Beecher and Robert L. Lineberry), in *Crime on
Urban Agendas*, Herbert Jacob, Robert L. Lineberry, et al. Report of the Governmental Responses to
Crime Project, Northwestern University. Washington, DC: National Institute of Justice, 1982.

- "Community Power, the Urban Agenda, and Crime Policy" (Janice A. Beecher, Robert L. Lineberry, and Michael J. Rich) *Social Science Quarterly* 2 (December 1981).
- "The Politics of Police Responses to Urban Crime" (Janice A. Beecher, Robert L. Lineberry, and Michael J. Rich), in *Reactions to Crime*, Dan A. Lewis, ed., Beverly Hills: Sage, 1981.
- Blowing in the Wind: The Prospects of Utility Adoption of Wind Energy Systems* (H. Paul Friesema, Janice A. Beecher, and Cleveland Fraser). Report to the Solar Energy Institute. Indianapolis, IN: The Institute of Ecology, 1980.
- "Federal Impacts on State Occupational Licensure," in *Illinois Sunset Review Project: Final Report*. Charles Williams, et al. Chicago: University of Illinois, 1980.

RESEARCH NOTES, PAPERS, AND PRESENTATIONS

- Institute of Public Utilities Research Notes (annual and intermittent). Topics include consumer prices and expenditures for utilities; regulatory jurisdiction; commission and commissioner demographics; commission organizational structures; commission mission statements; utilities and quality of life indicators; utility investment trends; regulatory case law; and ethics for regulators.
- "Michigan's Critical Infrastructure: Water and Sewer System Concerns," Michigan State University's Institute for Public Policy and Social Research Policy Forum, March 25, 2009.
- "The U.S. Water Industry: Structure, Regulation, and Pricing," at the 1st International Forum on Regulation of Water Services and Sustainability in Rome, Italy, January 21, 2009.
- "Incentives, Decoupling, and Alternatives," at IPU's Advanced Regulatory Studies Program in East Lansing, MI, October 9, 2008.
- "Utility Infrastructure," Michigan State University's Institute for Public Policy and Social Research Policy Forum, May 20, 2008.
- "Regulation the Public Interest Imperative," at Public Utility Law Subcommittee, Administrative Law Section of the State Bar of Michigan, Luncheon at Michigan State University May 7, 2008.
- "Climate Change, Utilities, and Economic Regulation: Understanding Markets, Efficiency, Incentives, and Policy Impacts," at Climate Change in the Great Lakes Region, Michigan State University, April 9, 2008.
- "Introduction to Utility Rates," Meeting of the Michigan Chapter of the International Rights of Way Association in Mount Pleasant, MI, April 4, 2008.

“Regulation as Social Compact,” and “Full-Cost Pricing,” at the 2007 National Drinking Water Symposium in LaJolla, California, October 1-2, 2007.

“Why we Regulate: A Primer” and “How Water Compares” at the 30th Annual Conference of Regulatory Attorneys in Bismarck, ND, June 4-5, 2007.

“Economic Regulation and Full-Cost Pricing,” Panelist and facilitator at the U.S. EPA Sustainable Infrastructure Forum in Groton, CT, April 30-May 1, 2007.

“Issues in Utility Regulation,” Meeting of the Michigan Chapter of the International Rights of Way Association in Ann Arbor, MI, March 7, 2007.

“Optimizing Critical Infrastructure Investment,” Annual Meeting of the National Association of Regulatory Utility Commissioners in Miami, FL, November 14, 2006.

“Utility Industries Compared” and “Institutional Options,” EPA Full-Cost Water Pricing Workshop at Michigan State University, November 1-3, 2006.

“Avoided Cost Analysis in Integrated Planning for Water Efficiency: Concepts, Controversies, and Guidelines” and “Water Efficiency Programs for Integrated Water Management” (T.W. Chesnutt, G. Fiske, J.A. Beecher, D.M. Pekelney). International Water Association Conference, Santiago, Chile, March 2005.

“The Tragedy of Common Benefits: Implementing Regional Conservation Anyway” (T.W. Chesnutt and J.A. Beecher). American Water Works Association Water Sources Conference, January 2004.

“Regulatory Independence and Ethics.” Annual Meeting of the Southeastern Association of Regulatory Utility Commissioners in Covington, KY, June 2005.

“Ethics and Development: The Practical Case of Public Utilities, Privatization, and Regulation.” Conference & Workshop on Ethics and Development: The Capability Approach in Practice at Michigan State University, April 2005

“The Role of Economic Regulation in Institutional Capacity Development.” CSIS Workshop on Global Water Futures in Washington, DC, February 2005.

“NARUC Critical Infrastructure Program: Overview of Technical Briefs.” Presented to the Ad Hoc Committee on Critical Infrastructure, National Association of Regulatory Utility Commissioners, February 2005.

"How Should State Regulatory Agencies Change in Response to the Changes in the Industries They Regulate?" Presented at the Western Conference of Public Service Commissioners in Anchorage, AK, June 2004.

"Structure and Regulation of the U.S. Water Industry." Presented to the Egyptian Minister of Housing in Washington, DC, April 2004.

"Privatization of Water Services: Limits to Competition and the Role of Regulation." Presented at the Salon des Technologies Environnementales du Quebec, March 2004.

"Technical Briefs for the Ad Hoc Committee on Critical Infrastructure," National Association of Regulatory Utility Commissioners (2004).

"Information Handbook for Preparing a Water System Management Plan: Requirements for Proposed New Community and Nontransient Noncommunity Water Systems," Handbook prepared for the Office of Water Quality, Indiana Department of Environmental Management (September 2003), 52 pp.

"U.S. and Global Regulatory Models." Presented to the National Drinking Water Symposium in Colorado Springs, CO, October 2003.

"Regulatory Change and Challenges." Presented to a forum sponsored by the Federal Reserve Bank of Chicago in Detroit, MI, March 2003.

"Ethics of Water Utility Privatization." Presented at the Annual Conference of the American Water Works Association in New Orleans, LA, June 2002.

"What Regulators Need to Know about Drought." Presented at the Annual Meeting of the New England Conference of Public Utility Commissioners, Stowe, VT, June 2002 and the Annual Meeting of the NARUC Water Committee, Portland, ME, July 2002.

"Closing the Gap: Regulatory Roles and Industry Challenges." Presented to the National Drinking Water Symposium in St. Petersburg, FL, March 2002.

"Investor Ownership of Water Utilities: Evidence from Indiana." A research report prepared for the American Water Works Company, Inc., 2001 (proprietary).

"Closing the Gap: The Water Infrastructure Funding Challenge." Presented at the Mid-America Regulatory Conference on Mackinac Island, Michigan, June 2001 and the Annual Indiana NAWC Chapter Meeting in Indianapolis, IN, September 2001.

"Multi-Objective Rate-making for Water Utilities: Efficiency, Equity, and Affordability." Presented at the Annual Conference of the American Water Works Association in Washington, DC, June 2001.

- “Survey of State Agency Water Loss Reporting Practices: Preliminary Findings” Presented at the Annual Conference of the American Water Works Association in Washington, DC, June 2001.
- “The Infrastructure Funding Gap: Reality Checks.” Presented at the American Water Works Association Infrastructure Conference in Orlando, FL, March 2001. Presented at the Annual Conference of the Council of State Community Development Agencies in St. Louis, MO, April 2001.
- “Handbook on Strategic Planning for Small Water Systems,” Working paper for the Environmental Protection Agency (2001).
- “Impacts of Deregulation on the Water Industry” (Janice A. Beecher and Scott J. Rubin). Presented at the Annual Conference of the California Urban Water Institute, March 2001; Pennsylvania Chapter of the National Association of Water Companies, October 2000; Metropolitan Water District of Southern California, August 2000; and Annual Conference of the American Water Works Association in Denver, CO, June 2000.
- “The Water Industry: Issues and Challenges.” Presented at the Annual Meeting of the Kentucky Rural Water Association, February 2001.
- “Strategic SDWA Compliance Planning for Small Systems” (Peter E. Shanaghan and Janice A. Beecher). Presented at the Annual Conference of the American Water Works Association in Denver, CO, June 2000. Presented at the Annual Meeting of the Kentucky Rural Water Association, February 2001.
- “Case Studies in Water Conservation,” Working paper for the Environmental Protection Agency (2000).
- “Assistance to Disadvantaged Communities in the Drinking Water State Revolving Loan Fund (DWSRF),” Working paper for the Environmental Protection Agency (2000).
- “Current Issues in Water Utility Regulation.” Annual Utility Conference of the Kentucky Public Service Commission, October 1999 and 2000.
- “Regulators’ Panel.” Moderator for a panel at the National Association of Water Companies Annual Meeting (General Session), 1996, 1999, and 2000.
- “Regulatory Incentives for Consolidation.” Presented at the Annual Conference of the Southeast Association of Regulatory Utility Commissioners in New Orleans, LA, June 2000.
- “Privatization, Monopoly, and Structured Competition in The Water Industry: Is There A Role For Regulation?” Presented at the Americana Environmental Conference in Montreal, March 1999; the Annual Conference of the American Water Works Association in Chicago, June 1999; and the Annual Conference of the University Council of Water Resources in Kona, HI, June 1999 ([link](#)).

- “Water Accountability and The EPA Water Conservation Plan Guidelines.” Presented at the Annual Conference of the American Water Works Association in Chicago, IL, 1999.
- “The Water Industry: Unique Characteristics and Innovative Regulatory Techniques.” Presented at the Meeting of the NARUC Subcommittee on Accounts in New Orleans, LA, March 1999.
- “Integrating Conservation in Resources Planning.” Moderator at Conserv99, Monterey, CA, February 1999.
- “Economic Framework for Assessing Small System Compliance Options,” Working paper for the Environmental Protection Agency (September 1999).
- “Sustainable Water Pricing: A Long-Term Capacity- Development Strategy,” Working Paper for the Environmental Protection Agency (September 1999).
- “Water Compared.” Presented at the Annual Meeting of the National Association of Water Companies, Greenbrier, WV, October 1998.
- “Single-Tariff Pricing.” Presented at the Annual Meeting of the National Association of Water Companies, Greenbrier, WV, October 1998.
- “Water Affordability.” Presented at the Meeting of the NARUC Subcommittee on Accounts in Indianapolis, IN, September 1998.
- “The Water Industry Compared: Structural, Regulatory, and Strategic Issues for Utilities in a Changing Context.” Presented at the five annual regional conferences of the National Association of Regulatory Utility Commissioners, Spring and Summer 1998.
- “The 1996 SDWA and Structural Change in the Water Industry.” Annual Convention of the American Water Works Association in Dallas, TX, June 1998.
- “Efficiency and Profitability: Conservation Incentives for Investor-Owned Water Utilities.” Presented at the Annual Conference of the American Water Works Association in Dallas, TX, June 1998.
- “Source-Water Protection under the 1996 SDWA: A Paradigm Shift.” Presented at the SPEA Statehouse Colloquium Series, February 1998.
- “Efficiency and Structure: Structural Change Under the 1996 SDWA.” Presented at the Annual Meeting of the Indiana Chapter of the American Water Works Association, February 1998.
- “The Last Monopoly: Competition and Regulation in the Water Industry.” Presented at the Annual Meeting of the National Association of Regulatory Utility Commissioners in Boston, MA, November 1997.

"Capacity through Restructuring: Structural Change in the Water Industry under the 1996 Safe Drinking Water Act." Presented at the Annual Meeting of the National Association of Regulatory Utility Commissioners in Boston, MA, November 1997.

"Sourcebook of Regulatory Techniques for Water Utilities." Presented at a general session of the Annual Meeting of the National Association of Water Companies in San Diego, CA, September 1997.

"Water Conservation Guidelines Provision in the 1996 Safe Drinking Water Act." Presented to the Illinois-Missouri Chapter at the Annual Meeting of the National Association of Water Companies, San Diego, CA, 1997.

"Water Conservation Guidelines Provision in the 1996 Safe Drinking Water Act." Presented at the AWWA/EPA Water Conservation Workshop in Denver, CO, September 1997.

Panel participant in the Water Policy Forum of the National Association of Water Companies in Naples, FL, September 1997, 1996, and 1995.

"Affordability Provisions of the 1996 Safe Drinking Water Act." Presented at the Annual Meeting of the Southeastern Association of Regulatory Utility Commissioners in Lexington, KY, May 1997.

"Alternative Ratemaking Approaches for the Water Industry." Presented at the University of Missouri 1997 Rate Symposium, St. Louis, MO, April 1997.

"Current Research Findings in Water Utility Ratemaking." Presented at the Annual Meeting of the Indiana Section of the National Association of Water Companies, March 1997.

"What are Fair Water Rates?" Presented at the Annual Meeting of the Indiana Chapter of the American Water Works Association, February 1997.

"Current Research Findings in Water Utility Ratemaking." Presented at a general session of the Annual Meeting of the National Association of Water Companies in Orlando, FL, October 1996.

"The Water Industry: Trends and Issues." Presented at the Mid-America Regulatory Conference in Chicago; June 1996; and the Great Lakes Conference of Utility Commissioners in Cleveland, July 1996.

"Water Pricing and Community Development." Presented at the Indiana Section meeting of the National Association of Water Companies, Indianapolis, IN, March 1996.

"Water and Wastewater Utility Privatization: A Global Perspective." A paper presented at a conference of the Institute for Global Climate Change, Indiana University, Bloomington, IN, March 1996.

Panel participant on "Impacts of Competition on the Water Industry." Water Committee Seminar of the Winter Meeting of the National Association of Regulatory Utility Commissioners in Washington, DC, February 1995.

Panel participant on "Musings on the Post-ULV Era." Conserv96 Conference in Orlando, FL, January 1996.

Panel participant on "Environmental Public-Private Partnerships--Setting the Tone for the Future" at the Annual Conference of the National Council for Public-Private Partnerships in Chicago, IL, October 1995.

"Regulatory Implications of Water and Wastewater Utility Privatization." Presented to the Illinois Commerce Commission in Springfield, IL, October 1995.

"Structure and Regulation of the Water Utility Industry: Changes and Challenges." Presented at the Utilities Conference of the Indiana CPA Society, October 1995.

"Water Demand, Prices, and Revenues: The Effects of Conservation." Presented at the Annual Conference of the American Water Works Association in Anaheim, CA, June 1995.

Moderator for "Reauthorization of the Safe Drinking Water Act" at the Annual Meeting of the Mid-America Regulatory Conference in Indianapolis, IN, June 1995.

"Emerging Issues in Benchmarking and Performance-Based Water Utility Regulation." Presented at the Annual Meeting of the New England Chapter of the National Association of Water Companies in Kennebunkport, ME, May 1995.

"Regulatory Implications of Water Utility Privatization: Research Findings." Presented at the Water Committee Seminar of the Winter Meeting of the National Association of Regulatory Utility Commissioners in Washington, DC, February 1995.

"The Water Industry: Coordinating Regulatory Functions and Resource Planning." Presented to the Select Committee on Water Policy of the Florida House of Representatives in Tallahassee, FL, February 1995.

"Emerging Regulatory Requirements for Conservation and IRP." Presented at the American Water Works Association Water Conservation Workshop in Santa Fe, NM, January 1995.

"Managing Watersheds for the Twenty-First Century: An Integrated Planning Perspective." Panelist at the Wayne Nichols Program, School of Natural Resources, The Ohio State University, November 1994.

"Impacts of Legislative Regulations." Panelist at the Annual Conference of the Water Management Association of Ohio, November 1994.

- "Integrated Approaches to Resource Planning and Environmental Protection." Organizer and moderator at the Public Policy Roundtable on Business and the Environment, School of Public Policy, The Ohio State University, October 1994.
- "Regulatory Excellence for the 21st Century." Presented at the Annual Meeting of the National Association of Water Companies in Scottsdale, AZ, October 1994.
- "Financial Distress Assessment Models for Small Water Utilities." Presented at the Annual Conference of the American Water Works Association in New York, NY, June 1994.
- "Decision Analysis for Integrated Resource Planning." Moderating panelist at the Annual Conference of the American Water Works Association in New York, NY, June 1994.
- "General Summary of the NRRI State Commission Survey on Water Conservation Pricing and Revenue Recovery Issues." Presented to the Committee on Rates and Charges at the Annual Conference of the American Water Works Association in New York, NY, June 1994.
- "Water Utilities and the Environment." Presented at the Annual Technical Conference of the National Association of Regulatory Utility Commissioners in Washington, DC, February 1994.
- "Incentive Regulation for Water Utilities." Presented at the Water Committee Seminar at the Winter Meeting of National Association of Regulatory Utility Commissioners in Washington, DC, February 1994.
- "Integrated Resource Planning for Water Utilities." Presented at Conserv93 in Las Vegas, NV, December 1993.
- "The Role of the State Public Utility Commissions in Water Conservation." Moderator for an affinity group at Conserv93 in Las Vegas, NV, December 1993.
- "Institutional Roles and Responsibilities for Integrated Water Resource Planning: Discussion Paper." Paper prepared for the Water Industry Technical Action Fund (WITAF) and presented at the Annual Conference of the American Water Works Association in San Antonio, TX, June 1993.
- "Consensus Building for Integrated Water Resource Planning: Discussion Paper." Paper presented at the Annual Conference of the American Water Works Association in San Antonio, Texas, June 1993.
- "Integrated Water Resource Planning: Discussion Paper." Paper prepared for the Water Industry Technical Action Fund, February 1993.
- "Water Utility Regulatory Issues." Panelist at the Meeting of the New England Chapter of the National Association of Water Companies in Plymouth, Massachusetts, June 1992.

- "Economic and Regulatory Impacts of the Safe Drinking Water Act." Paper presented at the New England Conference of Public Utility Commissioners, May 1992.
- "Contemporary Water Issues." Presented to the Energy and Public Utilities Committee of the Connecticut General Assembly in Hartford, Connecticut, January 1992.
- "Small Systems Solutions." Presented at the Annual Meeting of the National Association of Water Companies in St. Louis, Missouri, October 1990.
- "The Cost and Rate Impact of the Safe Drinking Water Act" (Patrick C. Mann and Janice A. Beecher) Paper presented at the Iowa State Regulatory Conference in Ames, Iowa, May 1990.
- "Economics of Future Water Supplies." Presented at the Conference on Water Sufficiency for the 21st Century Sponsored by the International Center for Water Resources Management, Central State University in Wilberforce, Ohio, May 1990.
- "State Regulatory Issues in the Age of Discovery." Presented at the American Water System Annual Management Seminar. Columbus, Ohio, May 1989.
- "Value, Cost, and Price: Essay on Emerging Water Utility Issues." Paper presented at the Symposium on International and Transboundary Water Resources Issues in Toronto, Ontario, April 1990.
- "State Public Utility Commissions and State Drinking Water Administrators: A Case for Interagency Coordination." Presented at the Environmental Protection Agency's Workshop on Financing Strong State Water Programs in Denver, CO, April 1989.
- "Applying Political Science." Panelist on the Applied Political Science Panel, Annual Meeting of the American Political Science Association, Chicago, Illinois, September 1987.
- "The Unclear Connection Between the Scientific Quality of Environmental Impact Statements and Public Policy: Experience in the USA" (H. Paul Friesema with Janice A. Beecher) Paper delivered by H. Paul Friesema at the International Seminar on the Role of Environmental Assessment in the Decisionmaking Process in Heidelberg, Federal Republic of Germany, August 1987.
- "Agricultural Energy Consumption and Conservation in Illinois: An Overview." Research paper prepared for the Illinois Commerce Commission, October 1984.
- "Utility Taxation and Consumer Costs in Illinois: A Statistical Report." Research paper prepared for the Illinois Commerce Commission, May 1984.

"Crime in the Cities: Politics and Policy Over a Generation" (Janice A. Beecher, Robert L. Lineberry, and Michael J. Rich) Paper delivered at the Annual Meeting of the Midwest Political Science Association in Cincinnati, Ohio, April 1981.

EXPERT TESTIMONY

Testimony (informal) on regulatory commission structure and independence before the Governor's Consumer Energy Protection Task Force in Helena, Montana, January 2004.

Testimony on ratemaking policy before Indiana Utility Regulatory Commission, September 2001.

Testimony before the United States Congress (Senate Public Works Committee and two House Subcommittees) on behalf of the H₂O Coalition regarding national water infrastructure funding issues, March 2001.

Testimony on ratemaking policy before the Missouri Public Service Commission, July 1997 and February 2001.

Testimony on water industry restructuring before the California Public Service Commission, November 2000.

Testimony on single-tariff pricing for water utilities before the California Public Service Commission, June 1999 and August 2000.

Testimony on single-tariff pricing for water utilities before the Missouri Public Service Commission, July 1997 and June 2000.

Testimony on single-tariff pricing for water utilities before the New Hampshire Public Service Commission, February 1998; before the Indiana Utility Regulatory Commission, February 1997; before the Florida Public Service Commission, February 1996.

INSTRUCTIONAL EXPERIENCE

UNIVERSITY COURSES

Guest lecturer. Michigan State University. Lectures related to utility regulatory policy.

"Regulation: Economic, Environmental, and Social" (Graduate, PPL891). Michigan State University Master in Public Policy Program. Summer 2009.

"Public Policy" (Graduate, PPL807). Michigan State University Master in Public Policy Program. Fall 2007 and Fall 2008.

"Government and Markets: Public, Private, and Nonprofit Roles" (Graduate PPL891). Michigan State University Master in Public Policy Program. Summer 2008.

"Regulated Industries" (College of Law, Course 523). Team taught with Prof. Adam Candeub. Michigan State University College of Law. Spring 2005 and Spring 2006.

"Privatization" (Graduate/Undergraduate, V450/550). School of Public and Environmental Affairs, Indiana University (IUPUI). Spring 1998, Summer 1997. Previously, "Politics and Markets," (Undergraduate Y380). Political Science, Indiana University (IUPUI). Fall 1996.

"Public Policy Process," (Graduate, V512). School of Public and Environmental Affairs, Indiana University (IUPUI). Fall 1995, Summer 1996, and Spring 1997.

"Introduction to Public Affairs," (Undergraduate, V170). School of Public and Environmental Affairs, Indiana University (IUPUI). Spring 1996.

"Public Policy and Program Implementation" (Graduate, PPM 803). School of Public Policy and Management, Ohio State University. Spring 1992 and Winter 1993.

"Public Policy Formulation and Administration" (Graduate, PPM 801). School of Public Policy and Management, Ohio State University. Fall 1991.

EDUCATIONAL WORKSHOPS AND FACILITATION

Annual Regulatory Studies Program, Institute of Public Utilities, Michigan State University. Curriculum architect and lead instructor for introduction to regulation, cost allocation, ethics and independence, and water industry regulation beginning in 2002. Coordinator and instructor for special orientation workshops for international regulators. Annual participation as core program faculty member since 1994. Also teach in other introductory, advanced, and specialty workshops conducted by the Institute (onsite and offsite).

Semi-Annual NARUC Water Utility Rate School. Lead instructor on comparative industry structures and regulation, rate design, and regulatory alternatives. Sponsored by the National Association of Regulatory Utility Commissioners. Since Fall 1997.

Special Seminars in Public Utility Regulation for International Professionals. Michigan State University, Visiting International Professional Program. Since Fall 2005. Includes customized programs for the Energy Market Regulatory Authority of Turkey and the Korea Electric Power Corporation.

Facilitation for the Board Retreat of the Organization of MISO States in Columbus, Ohio, March 28, 2008.

EPA Full-Cost Water Pricing Workshop. Hosted by the Institute of Public Utilities at Michigan State University, November 1-3, 2006.

Capacity Development for Water Systems. Workshop presentations to water professionals on capacity developments, financial capacity, managerial capacity, and ratemaking. Sponsored by the U.S. Environmental Protection Agency Drinking Water Academy, 2000-2001 (New Orleans, Minneapolis, Reno, Pierre, Denver, Cheyenne). Ongoing in 2001.

Facilitated Workshop on Water Utility Regulatory Issues. For the Connecticut Department of Public Utility Control, September 1999. For the Delaware Chapter of the National Association of Water Companies, April 2001.

Workshop for Congressional Staff Members on Water Infrastructure Issues. Sponsored by the H₂O Coalition, May 2001.

Workshop on the Valuation of Water Utilities. Overview of Policy and Regulatory Issues. Sponsored by Public Utility Reports and the National Association of Water Companies. San Diego, January 2000.

Workshop on Regulation and Privatization. Centre for Interuniversity Research and Analysis on Organizations (CIRANO), Montreal, March 1999.

Water Conservation Guidelines Workshop. Consultant to US EPA and panelist. Sponsored by the American Water Works Association and the U.S. Environmental Protection Agency. Denver, CO, September 1997.

AWWA National Teleconference on Water Industry Privatization. American Water Works Association. Denver, CO, November 1996.

Public Involvement Workshop. Moderator at the Annual Meeting of the American Water Works Association Meeting in Toronto, June 1996.

Workshop on Water Industry Structure, Regulation, and Ratemaking. Presented to a delegation from Japan. American Water Works Association. Denver, CO, April 1996.

Regulatory Studies Program for the Louisiana Public Service Commission, Institute of Public Utilities, Michigan State University. Baton Rouge, Louisiana, February 1996. Lead instructor for water utility regulation seminars.

Workshop on the Structure and Regulation of the Water Industry for the Ohio Consumers' Counsel. Columbus, Ohio, January 1996.

Advanced Regulatory Studies Program, Institute of Public Utilities, Michigan State University. Lead instructor for the water utility regulation seminars. Annapolis, Maryland, January 1996.

National Regulatory Research Institute Tutorial for New Commissioners. Instructor on structure and regulation of the water industry for in-house seminars. Columbus, Ohio, 1990 to 1995.

Workshop on Economic Regulation of Water Utilities in the United States. Presented to a delegation from Argentina (ETOSS). Washington, DC, April 1994.

Workshop on Institutional Options for Price Regulation of Water Utilities. World Bank, Washington, DC April 1994.

Water Policy Forum, NRRI Biennial Regulatory Information Conference. Organized and moderated a series of panels. Columbus, Ohio, September 1992 and September 1994.

APPOINTMENTS AND PROFESSIONAL ACTIVITIES

Advisory Board. Journal of Competition and Regulation in Network Industries. February 2009 to present.

International Exchange Program on Regulation of Water Services and Sustainability. Technical Advisory Board Member. Participated in inaugural meeting in Rome (January 2009). 2009 to present.

Aspen Institute Dialogue on Sustainable Water Infrastructure in the U.S. Invited technical expert, 2008-2009.

Center for Water Sciences, Michigan State University. Affiliate, 2006 to present.

Environmental Science and Policy Program, Michigan State University. Affiliate, 2007 to present.

Humphrey Fellowship Program Mentor, Michigan State University, 2005-2006, 2008-2009.

Dissertation Committee Member. Public Administration, Western Michigan University, 2004 to 2007.

Land Policy Council, Michigan State University. Member, 2005 to 2007.

Board of Directors. Center for Underground Infrastructure, Michigan State University, 2005 to 2007.

Freshwater Ecosystem Sustainability Certification Roundtable. Nature Conservancy, October 4, 2006.

Program Advisory Committee. World Forum on Energy Regulation III, 2005-2006.

Water Working Group. Environmental Change & Security Project, Woodrow Wilson International Center for Scholars. 2003 to 2005. Included study tour to Mexico.

Water Science and Technology Board's Committee on Privatization of Water Services in the United States. National Research Council, National Academy of Sciences, 1999 to 2002.

American Water Works Association. Chair of the Infrastructure Conference Planning Committee, 2002. Member of the Infrastructure Conference Planning Committee, 2001.

American Water Works Association. Member of the Competitive Practices Committee, 2000 to 2002. Member of the Rates and Charges Subcommittee of the Financial Management Committee, 1994 to 2002. Member of the Water Conservation Committee, 1993 to 1999. Liaison to the AWWA Management Division, 1995.

Report Reviewer. "Safe Water from Every Tap," National Research Council, National Academy of Sciences, 1996.

Project Advisory Committee. Small System Regionalization Study. American Water Works Association Research Foundation, 1994 to 1996.

Study Group on Identity. Indiana University Purdue University Indianapolis, 1995 to 1996.

Project Review Committee. The Future of Municipal Water Services. Rocky Mountain Institute, 1995.

Columbus Water Conservation Advisory Board. Mayoral appointment, 1994 to 1995.

Staff Subcommittee of the Water Committee. National Association of Regulatory Utility Commissioners, Observer, 1989-2002.

State of Ohio Pollution Prevention Development Workgroup. Governor's appointment, 1993 to 1994.

Executive Committee. Applied Section, American Political Science Association, 1987-1989.

Research Advisory Committee. The National Regulatory Research Institute, 1987-1988.

Alliance for Least-Cost Energy Planning. City of Chicago, 1987-1988.

Peer Review and Professional Input: Great Lakes Protection Fund, Water Resources Research, Journal of Infrastructure Systems, Water Resources Update, Water Resources Planning and Management, American Water Works Association Journal, American Water Works Association Research Foundation, U.S. Congressional Research Service, U.S. Government Accountability Office, U.S. Environmental Protection Agency, and numerous reports, publications, and proposals.

MAJOR RESEARCH SPONSORS

- ❑ Institute of Public Utilities Industry Advisory Board (annual support)
- ❑ National Association of Regulatory Utility Commissioners
- ❑ U.S. Environmental Protection Agency
- ❑ American Water Works Association and AWWA Research Foundation
- ❑ National Association of Water Companies
- ❑ National Regulatory Research Institute, The Ohio State University
- ❑ State regulatory and environmental agencies
- ❑ Environmental and economic consulting groups

EXPERTISE AND PROFESSIONAL SKILLS

- ❑ Regulatory theory, institutions, organizations, processes, and ethics
- ❑ Regulatory policy as standards, incentives, and accountability
- ❑ Market failure and the symbiosis of markets and regulation
- ❑ Public utilities, privatization, and the role of economic regulation
- ❑ Environmental and resource policy and regulatory coordination
- ❑ Water industry structure, regulation, and pricing
- ❑ Cost allocation and rate design for water and energy utilities
- ❑ Institutional, comparative, and intergovernmental policy analysis
- ❑ Research design, management, and general methods
- ❑ Interdisciplinary conceptual and analytical frameworks

[May 2009]