

Sandra O. Archibald
Daniel J. Evans School of Public Affairs
University of Washington
208 Parrington Hall
Box 353055
Seattle, WA 98195-3055

EDUCATION

Ph.D. Agricultural and Resource Economics, 1984, University of California, Davis
M.A. Public Administration, 1971, University of California, Berkeley
B.A. History, 1967, University of California, Berkeley

ACADEMIC APPOINTMENTS

Fall 2003-Present; Dean and Professor, Evans School of Public Affairs
University of Washington
Fall 2002-Fall 2003; Deputy Associate Dean, Humphrey Institute of Public Affairs
University of Minnesota
Summer 2002-Fall 2002; Interim Dean, Humphrey Institute of Public Affairs
University of Minnesota
2001-2002; Associate Dean for Academic Affairs and Research Programs, Humphrey
Institute of Public Affairs, University of Minnesota
1999-2002; Associate Vice Provost for Faculty Development, University of Minnesota
1998-Fall 2003; Professor, University of Minnesota, Humphrey Institute of
Public Affairs and Adjunct Professor Department of Applied Economics;
full graduate faculty membership in Water Resources Science; full graduate
faculty membership in Conservation Biology.
1992-1997; Associate Professor, University of Minnesota, Humphrey Institute of Public
Affairs; Adjunct Associate Professor, Department of Applied Economics
with full graduate faculty membership; full graduate faculty membership in
Water Resources Science; and associate graduate membership in
Management of Technology, University of Minnesota
November 1993-September 1997; Associate Dean and Director of Graduate Studies,
Humphrey Institute of Public Affairs
1983-1991; Assistant Professor of Applied Economics, Stanford University, Food Research
Institute

OTHER ACADEMIC, ADMINISTRATIVE & PROFESSIONAL APPOINTMENTS

Visiting Scholar, Goldman School of Public Policy, University of California, Berkeley,
Spring 2000
Director, Center for Science, Technology and Environmental Policy, Humphrey Institute of
Public Affairs, University of Minnesota, 1992-97

Sabbatical leave, Visiting Scholar, Department of Agricultural and Resource Economics,
University of California, Berkeley, Fall and Winter 1989
Visiting Research Economist, Agricultural Issues Center, University of California, Davis,
Summer 1989
Adjunct Lecturer, Graduate School of Management, University of California, Davis, 1982
Special Assistant for Academic Planning and Resource Management, Office of the Vice
President, University of California, Berkeley, 1976-78
Program Analysis Officer, Office of the Assistant Administrator for Research and
Development, United States Environmental Protection Agency, Washington,
DC; simultaneously served as staff consultant to Vice President of the
United States, Nelson Rockefeller, 1975-76
Director of Economic Analysis, Rockefeller Commission on Critical Choices for
Americans, New York, NY, 1974-75
Principal Analyst, Vice President for Planning and Budgeting, System wide
Administration, University of California, Berkeley, 1968-74

PROFESSIONAL ACTIVITIES

Habitat for Humanity Board of Directors, 2005
Global Partnership Board of Directors, 2005
Association for Public Policy Analysis and Management, First Vice President, 2005
Washington Council on International Trade Board, 2004-present
CARE Council of Advocates, 2004-present
World Affairs Council Board, 2004-present
Washington State Institute for Public Policy Board, 2004-present
US Congress Academic Committee, Comptroller General, 2004
Association for Public Policy Analysis and Management, Second Vice President 2004
American Water Works Association Research Foundation, Research Review Panel, 2001-
present
Association for Public Policy Analysis and Management, Program Committee, 2000
National Academy of Sciences, National Research Council, Water Science and Technology
Board and Commission on Geosciences, Environment and Resources,
Committee on American River Flood Frequencies, 1999
Northeast Midwest Institute and the National Oceanic Atmospheric Agency, Blue Ribbon
Panel: Economic Valuation of Great Lakes Environmental Benefits, 1997-
99
National Academy of Sciences, National Research Council, Water Science and Technology
Board and Commission on Geology and Geophysics, Committee on Review
of US EPA's Research Priorities (The ROPE Committee). 1996-1998
California Business Roundtable, State Chamber of Commerce and the California Farm
Bureau Federation, Academic Oversight Committee: California Water
Marketing Project, 1995-1996
National Academy of Sciences, National Research Council, Water Science and Technology
Board, Committee on Assessing the Value of Ground Water, 1994-1996
National Water Research Institute, Research Advisory Board, 1994-Present

National Academy of Sciences, National Research Council, Institute for Transportation, Committee on Hazardous Materials, 1991-1993

National Academy of Sciences, National Research Council, Institute of Medicine, Board on Nutrition, State Food Labeling Committee, 1991-1992

Center for International Food and Agricultural Policy, University of Minnesota, Center Faculty, 1992-2003

American Agricultural Economics Association, Economic Statistics and Information Committee, 1987-1995

American Agricultural Economics Association, Review Committee: Quality of Research Communication Award, 1992-1993, 1993-1994

International Apple Institute, Washington, DC, Environmental Affairs Advisory Committee, 1990

US EPA and UN Food and Agriculture Organization, International Congress on Pesticide Resistance Committee on Constraints to New Technology Adoption, 1990 - 91

USDA, National Agricultural Pesticide Impact Assessment Program, Review Panel on Agricultural Fungicides, 1990

University of California, Division of Agriculture and Natural Resources, Steering Committee, Food Safety Education Program, Oakland, CA 1989 -1990

Council for Agricultural Science and Technology, Task Force on Economic and Health Risks Associated with Mycotoxins, 1988-1989

American Agricultural Economics Association, Committee on Professional Activities, 1985-1987

Reviewer, American Journal of Agricultural Economics; Food Research Institute Studies; Journal of Applied Econometrics; Land Economics; Rand Journal of Economics; Western Journal of Agricultural Economics; World Bank, Journal of Soil and Water Science

CONSULTING

US Agency for International Development, Environmental Policy Training Project in Central and Eastern Europe, 1994-2000

National Water Research Institute, Analysis of Economics of Desalination in Southern California, 1999-2000

US Department of Interior, Bureau of Reclamation, Economics of Water and Federal Water Policy, 1990-1994

US Department of Justice, Economic Value of Indian Water Rights, 1989-1991

US Environmental Protection Agency, 1975; 1989; 2000

State of California, Department of Agriculture, Pesticide Policy and Economics, 1988

State of California, Department of Water Resources, Economics of Water Use, 1990-1992

State of Minnesota, Dakota County, Benefit-Cost Analysis Methods and Government Decision Making, 1999

National Grocery Manufacturers Association, Food Use Pesticide Policy, 1989

Spectrum Economics, San Francisco, CA, Pesticide Regulatory Policy, Energy Pricing and Regulation and State Conjunctive Water Use Policy, 1992

Western Consortium for Health, Berkeley, CA, Pesticide Regulatory Policy, 1989

Northwest Economics, Water Policy and Regulatory Analysis, 1991
Management Economics Group, Davis California, Firm and Market Economic Analysis,
1983-1987
Pacific Gas and Electric Company, Time-of-Use Energy Price Policy, 1983-1984
Hennepin County, Minnesota, CO-2 Project Evaluation Committee, 1994
Solano Irrigation District, Solano County, California, Value of Water Rights, 1992
Oakland City School District, Oakland, CA, Budgeting, Program Evaluation, 1973

HONORS AND AWARDS

NASPAA/ASPA Distinguished Research Award, 2004
Outstanding Teaching Award, Hubert H. Humphrey Institute of Public Affairs, University
of Minnesota, 1993
Quality of Research Communication Award, American Agricultural Economics
Association, 1989
Outstanding Dissertation Award, Department of Agricultural and Resource Economics,
University of California, Davis, 1984
United States Department of Agriculture, Economic Research Service, Dissertation
Research Grant, 1981-1983
Liquid Sugars, Inc., Graduate Study Research Grant, 1979-1980
Ford Foundation Research Grant, 1978-1979

SELECTED UNIVERSITY ASSIGNMENTS, UNIVERSITY OF WASHINGTON

Chair, Environmental Stewardship Advisory Committee, UW, 2004 - present
Chair, Business School Dean Search. 2004-2005

SELECTED UNIVERSITY ASSIGNMENTS, UNIVERSITY OF MINNESTOTA

University Council of Research Associate Deans, 2000-2003
Executive Vice Provost and President, Search Committee for Associate Vice Provost for
Faculty Development, 2002
President's Council on Learning assessment, 2001-2003
Commission on the Environment, 2000-2002
International Programs Office, Interdisciplinary Project on Genetically Altered Foods, 2000
Elected University Senator, 1997-1999; 1999-2001
Graduate School, Social Science Policy Review Council (Chair), 1995-1996, 1996-1997
Graduate School Executive Committee, 1995-1996, 1996-1997
Graduate School, Search Committee, Fessler-Lambert Chair, 1995-1996
Institute of Technology, Search Committee, Braun-Intertec Chair, 1994-1995
Vice President Research, Academic Integrity Committee, 1994-1995, 1995-1996
Graduate Program in Water Resources Science, Curriculum Committee, 1995-97
Department of Applied Economics, Seminar Committee, 1995-1996
Graduate School Task Force: Curriculum for Urban and Regional Planning Program, 1997
Vice President and Provost, Humphrey Institute Dean Search Committee, 1996-1997,
1997-1998

Humphrey Institute, Promotion and Tenure Committee 1996-1997; Chair, 1999-2000
Humphrey Institute, Member, Graduate Admissions Director Search Committee, 1999 -
2000
Humphrey Institute, Member, Development Officer Search Committee, 1999 -2000
Humphrey Institute, Member, Oversight Committee for Dual Executive Masters' Program,
1997-1999
Humphrey Institute, Graduate Advisory Committee, Chair, 1993-1997
Humphrey Institute, Semester Transition Committee, Chair, 1995-1997
Humphrey Institute, Coordinator, Graduate School External Program Review, 1995-1996
Humphrey Institute, Mid-career Program Design Committee, 1995-1997
Humphrey Institute, Public and Non-Profit Management Search Committee, 1995-1996
Humphrey Institute Social Policy Search Committee, Co-chair, 1995-1996
Humphrey Institute Ph.D. Program Design Committee, 1992-1993, 1993-1995 (Co-chair)
Humphrey Institute Admissions Committee, 1992-1994
Humphrey Institute, Served on numerous committees in capacity of Associate Dean, both
within the Institute and the University

TEACHING

Graduate Instruction

Production Economics, Stanford University
Advanced Research Methods, Stanford University
Advanced Seminar in Production Economics, Stanford University
Interaction of Biology and Economics in Agriculture, Stanford University
Intermediate Microeconomic Theory, University of Minnesota
Advanced Microeconomic Policy Analysis, University of Minnesota
Introduction to Policy Analysis, University of Minnesota
Economics of Natural Resource and environmental Policy (cross-listed with
Applied Economics), University of Minnesota
Capstone Workshop in Environmental Policy Analysis
Technology Policy (cross-listed with Institute of Technology), University of
Minnesota
Regulatory and Environmental Policy in Agriculture, University of
California, Davis
Innovation in Strategic Planning, Skills Workshop, University of
Washington

Undergraduate Instruction

Microeconomic Principles for Program in Human Biology, Stanford
University

Mid-Career Courses

Microeconomics
Benefit-Cost Methods
Environmental Policy Design
US Technology Policy

INTERNATIONAL EXPERIENCE: Associated with Research/Teaching Activities
(Alphabetical order by country)

- Argentina, September 24-26, 1992, one-week in-country participating in the SIV Congreso El Desafio del Mercado sponsored by the Asociacion Argentina de Consorcios Regionales de Experimentacion Agricola, Capital Federal and Mendoza, Argentina. Speaking and advising on food-safety policy and technology
- Brazil, June 4, 1997, Keynote Address, Agricultural Policy and Implications for Major World Participants, 50th Anniversary of MANAH, S/A, Sao Paulo, Brazil.
- France, June 1997, Participate in Second Toulouse Conference on Environment and Resource Economics, Institut D'Economie Industrielle, Universite des Sciences Sociale, Toulouse, France
- Hungary, November 1993, approximately one week in-country conducting training in Environmental and Resource Economics, University of Minnesota-USAID Environmental Training Project for Central and Eastern Europe
- Italy, February-March 1992, approximately three weeks in-country participating in an invited lecture series on Food Safety and Food Policy at Instituto di Economia E Politica Agraria, Universita Degli Studi Di Verona, Verona, Italy; Assolambardo Food Industry Group in Milano, Italy; the Instituto Nazionale di Economia Agraria, Roma, Italy; the Centro di Specializzazione e Ricerche, Portici, Italy; and Universita degli Studi Della Calabria, Dipartimento di Economia Politics, Cosenza, Italy
- Italy, June 1996 VI Meeting of Exchange between the University of Minnesota and the University of Padova, workshop and exploration of mutual research interests.
- Italy, June 1998, World Congress of Resource and Environmental Economists, Venice, Italy
- Italy, June 1999, VIII Meeting of Exchange between the University of Minnesota and the University of Padova, workshop and exploration of mutual research interests.
- Mexico, May 1995, Bi-national Workshop on Transboundary Resource Problems in the Era of NAFTA, sponsored by the NWRI, Imperial County, California and the Government of Mexico
- Mexico, September 1986-1988, US Mexico Project between Stanford University's Americas Project and the Center for Economic Studies, El Colegio de Mexico, approximately four weeks in-country participating in workshops and field work investigating small-holder Mexican agriculture and technology adoption.
- Poland, 1997-2002, teaching in the University of Minnesota Joint Degree Program in Public Affairs
- Romania, March 1995, approximately one week in-country conducting training in Environmental and Resource Economics, University of Minnesota-USAID Environmental Training Project for Central and Eastern Europe and Harvard Institute for International Development, Sinaia, Romania

- Romania, June 1999, one week in-country conducting training on Valuation of Environmental Resources, University of Minnesota-USAID Environmental Training Project for Central and Eastern Europe, Baille -Felix, Romania
- Romania, October 2000, one week in-country conducting training on Environmental and Resource Economics, University of Minnesota-USAID Environmental Training Project for Central and Eastern Europe, Cluj, Romania
- Sweden, 1992-2003, Humphrey Institute-Swedish Futures Institute Collaboration on Common Policy Issues, approximately one week in-country on alternating years organizing and participating in International Annual Conferences (with Robert Kudrle). Topics included: Global Environmental Change, Transportation Policy, The International Economy and National Governance, Health Care Policy.

RESEARCH GRANTS AND CONTRACTS

- Northwest Area Foundation Planning Grant, (\$60,000), 2005
- National Water Research Institute, Value of Water Supply Reliability in Southern California (\$34,000), 2002
- National Association of Schools of Public Administration and US Environmental Protection Agency Small Communities Outreach Project Grant (\$5,000) Minimizing the Adverse Impacts of Rulemaking on Small Business: Primary Drinking Water Regulations: Groundwater Rules, 2000
- Northeast Midwest Institute and NOAA. Economic Valuation of Great Lakes Water Resources Grant (\$7,500), 1999-2000
- Co-Principal Investigator (with Dan Farber, Law School), Ford Foundation -Humphrey Institute of Public Affairs Grant (\$26,000) Develop interdisciplinary water policy research related to Treat Lakes Institutions and Water Rights, 1998-1999
- Principal investigator, New Initiatives in Interdisciplinary Research and Post -baccalaureate Education-University of Minnesota graduate School (\$96,000) Interdisciplinary investigation to value Great Lakes resources, 1997-1999. (co-investigators: K. William Easter, Hans Gregerson, Tom Johnson and Mary Renwick)
- Co-Principal investigator (with K. William Easter, Applied Economics; Hans Gregerson, Forest Resources; Tom Johnson, Large Lakes Observatory) (\$65,000) Economic research to value the use and non-use services of the Great Lakes, 1996-1997
- Co-Principal investigator (with Estelle Bower and Mary Renwick) Minnesota Extension Service (\$63,000) Policy Issues for Lake Superior, 1997
- Principal investigator, Canadian Studies grant (\$9,000) Develop a bi-national research agenda to value climate change impacts on Great Lakes water resources, 1996
- Principal investigator, Minnesota Sea Grant Research Development Grant (\$5,000) Develop a water policy research program focused on Lake Superior, 1996

- Principal investigator, Faculty grant-in-aid, Graduate School (\$14,000) The economics of residential water use. 1995-1996
- Principal Investigator, US Department of Interior, Bureau of Reclamation (\$20,100) Economic Adjustments to Environmental Water Allocations, 1994-1995
- Principal Investigator, State of California Water Quality Control Board Economic Working Group---Stanford University (\$400,000) Economic and financial Impacts of Water Availability for California Agriculture, 1991-1992
- Principal Investigator, Morrison Population and Resource Institute—Stanford University Research Grant (\$10,000), 1990
- Principal Investigator, Center for Economic Policy Research—Stanford University (\$10,000) Environmental and Policy Resources Research Grant
- Principal Investigator, Bureau of Reclamation, Department of Interior (\$75,000) Economic Profile of Irrigated Agriculture, West side San Joaquin Valley, 1989-1990
- Co-Principal Investigator (with David Zilberman), US Environmental Protection Agency, Office of Program Planning and Evaluation—Western Health Consortium (\$40,000) Modeling Welfare Impacts of Pesticide Bans, 1989-1991
- Principal Investigator, Ford Foundation Research Grant—US Mexico Project, Stanford University (\$25,000) Economics of pesticide use in Mexican agriculture, 1988
- Principal Investigator, Chemicals in the Human Good Chain—Policy and Regulation, Agricultural Issues Center, University of California, Davis (\$60,000) Policy and regulation governing food use pesticides, 1987-1988.

PUBLICATIONS

Books and Monographs

- Management and Leadership in Higher Education*, 1982. San Francisco: Jossey Bass, Inc., (with Chester O. McCorkle), 236 pages.
- An Economic Analysis of Water Supply Availability in California Agriculture*, 3 Volumes, 1992. Center for Economic Policy Research, Stanford University, 450 pages
- A Bio-Economic Analysis of Pesticide Productivity: Pesticide Resistance in California Cotton*, 1986. Department of Agricultural and Resource Economics, Research Report No. 86-3, University of California, Davis, 115 pages.

JOURNAL ARTICLES AND BOOK CHAPTERS

- “Assessing Progress Towards Sustainable Development in Central and East European Countries and the New Independent States.” *European Environment: The Journal of European Environmental Policy*, (with Zbigniew Bochniaz, Mashiako Gemma, Chune-Loong Lum). (Forthcoming.)

- “Market Liberalisation and Sustainability in Transition: Turning Points and Trends in Central and Eastern Europe” (with Luana E. Banu and Zbigniew Bochniarz). 2005. In *EU Enlargement and the Environment* (eds, JoAnn Carmin and Stacy D. VanDeveer). Routledge. Pp266-289.
- “Market Liberalisation and Sustainability in Transition: Turning Points and Trends in Central and Eastern Europe.” *Environmental Politics*, Vol.13, No.1, Spring 2004, pp.266-289. (with Luana E. Banu and Zbigniew Bochniarz).
- “Environmental Outcomes Assessment: Using Sustainability Indicators to Measure Environmental Outcomes for Central Europe to Measure Transition Effects on the Environment,” in *Does Environmental Policy Work: Theory and Practice of Outcomes Assessment*. (Ervin, Kahn and Livingtson, ed). 2003 Elgar Press. Wallace Oates (series ed.) *New Horizons in Environmental Economics*.
- “Assessing Environmental Impacts of Transition,” *Periphery*, Volume 6/7. 2000-01, pp: 86-92 (with Zbigniew Bochniarz).
- “Benefit-Cost Analysis and Its Use in Regulatory Decisions.” 1999. Chapter 8 in Ken Sexton et.al (ed.) *Better Environmental Decisions*. Washington, D.C.: Island Press (with K. William Easter and Nir Becker) pp. 157-176.
- “Estimation of Optimal Forest Protection Expenditures under Uncertainty,” 1998. *Journal of Forest Planning* (with Syed A. Husain, Dietmar Rose, Joan Nichols).
- “Demand Side Management Policies for Urban Water Use: Who Bears the Conservation Burden,” 1998. *Land Economics* Vol. 74(3) (with Mary E. Renwick) pp. 343-59.
- “Identifying Agricultural Sites for Biomass Energy Production in Minnesota,” 1998. Chapter 7 in K. William Easter, Ariel Dinar and Mark Rosegrant (Eds.) *Markets for Water: Potential and Performance*, (Eds.). Natural Resource Management and Policy Series, Kluwer Academic Press, (with Mary E. Renwick) pp. 95-118.
- “A Framework for the Integration of Environmental and Sustainable Development Issues into Agricultural Planning and Policy Analysis,” 1996 (with G. Edward Schuh).
- Chapter 1 in Steven A. Breth (Ed.) *Integration of Sustainable Agriculture and Rural Development Issues in Agricultural Policy*. Winrock International, pp. 3-44.
- “Impact of Central Planning on Production Efficiency: The Case of the Cotton Textile Industry in China,” 1993. *Journal of Comparative Economics*, Volume 17, March, pp.: 23-42 (with Kamman Cheung and Miguel Faig).

- “Technology and Labor Intensive Agriculture: Competition Between Mexico and the United States,” 1992 (with David Runsten), in Jorge A. Bustamante, Clark W. Reynolds, and Raul A. Hinojosa, *U.S. – Mexico Relations: Labor Market Interdependence*. Stanford: Stanford University Press, pp.: 449-476.
- “A Flexible Model of Factor-Biased Technological Change: An Application to Japanese Agriculture,” 1991. *Journal of Development Economics*. Vol. 35(1): 127-45 (with Loren Brandt).
- “Regulating Chemicals: A Public Policy Challenge,” 1990. *Choices*. First Quarter, pp.: 20-25.
- “Pesticides in Food: Assessing the Risks,” 1990. Chapter 1 in C.K. Winter, J.N. Seibert and C.F. Nuckton (Eds.), *Chemicals in the Human Food Chain*. New York: Von Nostrand Reinhold Co., Inc., pp. 1-50 (with Carol Winter).
- “California’s Proposition 65: A New Regulatory Trend?” 1989. In John Braden (ed.) *Agriculture and Water Quality: International Perspectives*. Boulder: Lynne Rienner Publishers, Inc., 147-67 (with Gloria Helfand).
- “Pesticide Residues and Cancer Risks,” 1989. *California Agriculture*. Vol. 43(6): 6-9 (with Carl Winter).
- “Incorporating Externalities in Agricultural Productivity Analysis,” 1988. Chapter 13 in Capalbo, S.M. and J.M. Antle (Eds.), *Agricultural Productivity: Measurement and Explanation*, Baltimore: Johns Hopkins Press, pp. 366-395.
- “Regulating U.S. Food Processing Industries,” 1988. Chapter 5 in C.O. McCorkle, Jr. (ed.), *Economics of the U.S. Food Processing Industries*, New York: Academic Press, pp: 167-214 (with Dale Dahl).
- “Food Industry Dynamics and Economic Policy,” (with Alex McCalla and C.O. McCorkle) 1988. Chapter 12 in C.O. McCorkle, Jr. (Ed.), *Economics of the U.S. Food Processing Industries*, New York: Academic Press, pp. 409-434.
- “Trends in the U.S. Food Processing Industry: Implications for Modeling and Policy Analysis in a Dynamic Interactive Environment,” 1985. *American Journal of Agricultural Economics*, Vol. 67, No. 5: 1149-1154; (Japanese translation) in *Nobiyuku Nogyo*, Tokyo, Japan, 1987 (with Alex F. McCalla and C. O. McCorkle).
- “Meeting the Challenges of the 1980s—A Perspective on Higher Education,” 1980. *Western Journal of Agricultural Economics*, Vol. 5(2): 203-208 (with C.O. McCorkle).

PUBLISHED RESEARCH REPORTS

- “Evaluating Environmental Effects of the Transition in Central and East European Countries: A Preliminary Research Report. Center for Nations in Transition, Hubert H. Humphrey Institute of Public Affairs, University of Minnesota, Minneapolis, MN, September 2001. 25 pages.
- “What Does the Law Require,” Chapter 2 in *Science for Solutions: Great Lakes Economic Valuation Handbook*, 2000. Decision Analysis Series. Washington, DC: National Oceanic and Atmospheric Agency, US Department of Commerce. Pp. 120-22.
- National Research Council, Water Science and Technology Board and Commission on Geosciences, Environment and Resources, *Report on American River Flood Frequencies*. Committee on American River Flood Frequencies, 1999.
- National Research Council, Committee on Research Opportunities and Priorities for EPA, *Building a Foundation for Sound Environmental Decisions*. 1997. A Report to the Board on Environmental Studies and Toxicology, the Water Science and Technology Board, and the Commission on Geosciences, Environment and Resources. Washington, DC: National Academy Press, 88 pages.
- National Research Council, Committee on Valuing Groundwater, 1997. *Valuing Ground Water: Economic Concepts and Approaches*. Water Science and Technology Board, Washington, DC; National Academy Press, 204 pages.
- Transportation Research Board, *Special Report 239: Hazardous Materials Shipment Information for Emergency Response*. 1993. Institute for Transportation, Washington, DC: National Academy Press, 232 pages.
- National Research Council, Committee on State Food Labeling, 1992. *Food Labeling: Toward National Uniformity*. Board on Nutrition, Institute for Medicine, Washington, DC: National Academy Press, 256 pages.
- Economic Profile of Agriculture in the West Side of the San Joaquin Valley*, 1990. Report to the San Joaquin Valley Drainage Program, U.S. Department of Interior, Sacramento, CA, July.
- Modeling Impacts of Fungicide Cancellations in the U.S. Apple Market*, 1989. A Report to the Office of Policy, Planning and Evaluation, United States Environmental Protection Agency, Washington, D.C., September, 45 pages (with Tim Brown and David Zilberman).
- “Economic Impacts of Mycotoxins,” 1989. In *Mycotoxins: Economic and Health Risks*, 1989. Report No. 116, Council for Agricultural Science and Technology, Ames, Iowa, pp. 45-53.

Shared Markets, Shared Risks: Pesticides in Mexico and the US, August 1989. Report to the Ford Foundation, US-Mexico Project, Stanford University, Stanford, CA, 76 pages (with Robin Marsh and M.C. Robledo).

Regulating Chemicals: A Public Policy Quandary, 1988. (Ed.) University of California: Agricultural Issues Center

National Research Council, Committee on Emerging Trends in Agriculture, *Emerging Trends in Agriculture and Their Impact on Wildlife Habitat*, 1982. Board on Agriculture and Renewable Resources, Washington, DC: National Academy Press.

PAPERS PUBLISHED IN PROCEEDINGS

“Benefit-Cost Analysis and Regulatory Decisions.” Proceedings: *6th Joint Conference on Agriculture, food and the Environment*, St. Paul, Minnesota, August 31 - September 2, 1998. Published by University of Padova, Padova, Italy (with K. William Easter).

“The Rose of Regulatory Reform in Sustainable Development: An Economist’s Perspective,” 1996. In Ken Sexton and Barbara Scott Murdock (Eds.) *Environmental Policy in Transition: Making the Right Choices*, Minnesota Series in Environmental Decision-Making, Volume (1): 85:91.

“Integrating Environmental and Sustainable Development Issues into Agricultural Policy Analysis,” Invited Paper. *Proceedings: 5th Joint Conference on Agriculture, Food and the Environment*, Padova, Italy, June 17-18, 1996 (with G. Edward Schuh).

“Institutional and Bio-Physical Constraints on Water Transfers,” 1995. Selected Paper. *Abstract in Proceedings*. Western Social Science Association, Oakland, California, April 26-28.

“Research Information Needs to Facilitate the Regulatory Policy Process,” 1991. Invited paper. Published in *Proceedings: Look Through the ‘90s: The U.S. Fruit and Vegetable Industry*.” Workshop sponsored by The S-222 regional Research Committee and the Farm Foundation. June 10-11, Washington, DC

“Getting the Pig to Market: Economics of Biotechnology.” 1990. Invited Paper. Organized Symposium on Developments in Animal Biotechnology, Chemistry and Biotechnology. *Abstract in Proceedings*, American Association for the Advance of Science Annual Meeting, New Orleans, Louisiana, February 18-19.

- “Policy and Regulation Governing Pesticides,” 1988. In Harold O. Carter and Carole Frank Nuckton (Eds.), *Chemicals in the Human Food Chain: Sources, Options and Public Policy*. Proceedings of a symposium, University of California Agricultural Issues Center, Sacramento, California, June 3-4.
- “Managing Pesticide Resistance,” Invited paper. Abstract in *Proceedings*, IAAIE Annual Conference, San Luis Obispo, California, February 6-7, 1989.
- “Food Quality and Safety,” 1987. Invited Paper. In Harold O. Carter and Carole Frank Nuckton (Eds.), *Marketing California’s Specialty Crops: Proceedings of a Symposium*, Agricultural Issues Center, University of California, Sacramento, California, June 1-2.

PAPERS PRESENTED AT PROFESSIONAL MEETINGS (1987-2000)

- “Liberalization and the Environment in Countries in Transition,” Conference on the Global Environment, Austrian Center, University of Minnesota, Minneapolis, MN, September 21, 2002
- “Comparative Rural Development Policies: What Can We Learn from the US,” 2000. 8th Joint Conference on Food, Agriculture and the Environment, University of Bologna, Bologna, Italy, June 10-15
- “An Empirical Analysis of the Environmental Kuznets Curve in Central and Eastern European Transition Economies.” 1999. Selected Paper. European Association of Environmental and Resource Economists, June 22 -25, University of Oslo, Oslo, Norway
- “Modeling Sustainable Growth: Determining the Effects of Economic Restructuring and Environmental Investments on Productivity Growth in Central European Countries,” European Conference of Environmental and Resource Economists, Warsaw, Poland, September 24 -26, 1998 (with Zbigniew Bochniarz).
- “Managing Transboundary Water Resources: Hidden Impacts of Consumptive Water Uses in the Great Lakes,” 1998. Selected paper, American Agricultural Economics Association Annual Meetings. Salt Lake City, Utah, August 2-5. Abstract in *American Journal of Agricultural Economics*, Vol. 80(5). December 1998, pp. 1189 (with Nir Becker, K. William Easter and Mary E. Renwick.)
- “Transactions Costs and Incentives for Water Market Development,” 1997. Organized Symposium. Environmental Policy Choices: Are Politicians the Only Ones Measuring Transactions Costs? American Agricultural Economics Association Annual Meeting, Toronto, Canada, July 27 -30.

- “Modeling Urban Water Demand,” 1997. Second Toulouse Conference on Environment and Resource Economics, Institut D’Economie Industrielle, Universite des Sciences Sociale, Toulouse, France, May 14-16.
- “Demand Side Management Policies for Residential Water Use: Who Bears the Conservation Burden,” 1997. Selected Paper. Western Regional Science Association Annual Meeting, Big Island, Hawaii, February 23-27.
- “Modeling Gains-from-Trade in the California Water Industry: A Response to Environmental Water Demands,” 1996. Invited paper. Western Regional Science Association 35th Annual Meeting, Silverado Country Club, Napa, CA, February 25-29 (invited for submission to *Annals of Regional Science*).
- “The Value of Information in Pesticide Regulation,” 1994. Invited Paper. Annual meeting of the National Association for Science and Technology: Technological Citizenship and Future Generations, Washington, D.D., January 22-23.
- “Institutional Factors in Economic Policy analysis: California Rice Production,” 1993. Invited Paper. An International Workshop on Japanese Agriculture, Social Science Research Council, East West Center, Honolulu, Hawaii, August 15-21.
- “The Effect of Work Capacity on Agricultural Wages: Are there Rewards to Physical Capital Development?” 1993. Selected poster. American Agricultural Economics Association Annual Meeting, Orlando, Florida, August 1-4 (with Kim Chung and Reynaldo Martorell).
- “Pest Control in Mexico: Parastatals, Pesticide Use and the Circle of Poison,” 1992. Organized Symposium on Chemical vs. Biological Control of Pests: An International Comparison. American Agricultural Economics Association Annual Meeting, Baltimore, MD, August 10.
- “An Economic Model of Pesticide Quality and Quantity Effects on Apple Production,” 1991. Selected paper. American Agricultural Economics Association Annual Meeting, Manhattan, Kansas, August 2 (with Tim Brown and David Zilberman).
- “Modeling Welfare Impacts of Pesticide Bans in California Agriculture.” 1991. Selected paper. Western International Economics Association Annual Meeting, Seattle, Washington, July 4 (with Julie Hewitt).
- “The Cost of Imperfect Information in Pesticide Regulation,” 1990. Organized Symposium. American Agricultural Economics Association Annual Meeting, Vancouver, B.C., August 4-6.

- “Isolating Bias in Econometric Estimates of Technical Change,” 1989. Selected paper. American Agricultural Economics Association Annual Meeting, Louisiana State University, Baton Rouge, Louisiana, July 30-August 2.
- “The Economics of Biotechnology,” Symposium on Biotechnology on the Farm: Developments and Impacts in Production Agriculture. Life Sciences and Technology Section, American Association of Allied Science Annual Meeting, San Francisco, California, January 14-19, 1989.
- “Optimal Pest Control Strategies Incorporating Resistance,” 1988. Selected paper. Annual meeting of the Society for Optimal Control and Dynamics, Arizona State University, Tempe, March 10-13, 1988.

BOOK REVIEWS

- Review of National Research Council, *Regulating Pesticides in Food: The Delaney Paradox in Land Economics*, 1989. 65(1): 79-86.
- Review of David Debertin, *Agricultural Production Economics* for the *American Journal of Agricultural Economics*, Vol. 69, May 1987.

Written Testimony (1987-Present)

- “An Economic Analysis of Water Availability in California Agriculture: Impacts of Federal Water Quality Policy,” 1992. Testimony before the California State Water Resources Control Board, San Francisco, California, July.
- “Economic Impacts of California’s Conjunctive Use Water Policy on Agriculture,” 1992. Testimony before the California Public Utilities Commission, San Francisco, California, March.
- “Economic Implications of Increased Groundwater Pumping in Response to Drought-Induced Surface Water Shortages,” 1992. California Public Utilities Commission Hearing on the Economic Implications of Higher Electricity Rates to Agricultural Class Customers and the Various Alternatives Available to Reduce Their Electricity Demands, Sacramento, California, March 27.
- “Developing Food Safety Policy for Food Use Pesticides: Trade Implications of Pesticide Bans,” 1990. Testimony before the International Trade Commission, Washington, D.C., May.

TECHNICAL REPORTS AND WORKSHOP PROCEEDINGS

- The Value of Water. 1999 (with C.W. Abdalla, B.L. Cross, P. Hall, J.K. Lazo, K.P. Lindstrom, B. Sheikh and G. Silva). National Water Research Institute. NWRI-99-011. Fountain Valley, California.
- “Economic and Environmental Indicators to Guide Land Use Planning,” 1998. A Report of Cook County, Minnesota Planning Commission, Humphrey Institute of Public Affairs and Minnesota Extension Service, Minneapolis, Minnesota (with Mary E. Renwick, Tom Rosales and Tim Thoreen).
- Groundwater Disinfection Regulation Workshop: Proceedings*, 1997. Occasional Paper NWRI-97-1, Fountain Valley, California. National Water Research Institute.
- “Benefits from A quality Assurance Program that Integrates Public Health Information: A Task Force Report,” 1997. *Proceedings: Groundwater Disinfection Regulation Benefits Conference*. National Water Research Institute, Arnold and Mabel Beckman Center of the National Academies of Sciences and Engineering, Irvine, California, March 17.
- “Transboundary Resource Problems in the Era of NAFTA: The Case of the New River,” 1995. *Proceedings* from a Bilateral Workshop. National Water Research Institute, County of Imperial, California and the Government of Mexico, Holtville, California, May 19.
- “Pesticide Residues and Cancer Risks,” *A Woman’s Place*, January 1994, pp.: 34-37.
- “Mixing Water and Electricity: Conjunctive Use Policy in California Agriculture,” 1993. San Francisco, California: *Spectrum Economics* (with Steve Moss).
- “Global Trends in the Aluminum Recycling Industry.” 1992. State and Local Policy Program, Recycling Conference, Humphrey Institute of Public Affairs, University of Minnesota, November (with David van Hattum and Karen Linner).
- “Institutional Factors in Agricultural Adjustments to Trade Liberalization: Japanese and California Rice Production,” 1988. Working Paper, Social Science Research Council.
- “Analysis of Pacific Gas and Electric Company’s Load Management ‘PA-2’ Time-of-use Rate Program,” 1985. A Report prepared for Pacific Gas and Electric Company, December, 40 pages.

SEMINARS, INVITED LECTURES AND ADDRESSES (1987-Present)

- “The Next Decade in Trade: Emerging Giants; U.S. Response,” 2005. Panelist for Washington Council on International Trade Senator’s Conference, Seattle, WA, July 7.
- “Can We Achieve Sustainable Growth: Lessons from Central and Eastern Europe,” 2005. PBAF 595A Attaining a Sustainable Society, University of Washington.
- Keynote Speaker, Scottish Rite Scholarship Banquet, 2004. Seattle, WA, September 28.
- “The People Speak: American’s Role in the World,” 2004. Panelist for The People Speak, Seattle, WA, October 4.
- “America’s Stake in Eliminating Extreme Global Poverty,” 2004. Panel Discussion, Washington Council on International Trade, Seattle, WA, April 15.
- ”California Water Policy,” 2002. Lectures in California Policy Issues, Goldman School of Public Policy, University of California, Berkeley, California, February.
- “The Environmental Kuznets Curve: Some Empirical Evidence.” 1999. Seminar in Environment and Resource Economics Department of Applied Economics, University of Minnesota.
- “Transactions Costs and Water Markets,” 1997. Seminar in Environment and Resource Economics Department of Applied Economics, University of Minnesota, Winter and the Humphrey Institute Seminar Series, Spring.
- “Policy Analysis and the Case Study Method,” 1995. Workshop, APPAM Annual Conference, Washington, DC, November 2.
- “Technology, Growth and Development,” 1996. Economics 5312, Department of Economics, University of Minnesota, February 7.
- “Health Care Policies in the Clinton Era,” 1995. Summer, University of Southern Stockholm, Novum Research Park, Stockholm, Sweden, August 23.
- “Managing Water Resources Worldwide,” 1995. Global Commons Seminar, Humphrey Fellows Program, University of Minnesota, Humphrey Institute, November .
- “Food Safety: Women and Children at Risk from Pesticides,” 1994. Seminar, Center on Women and Public Policy, January 11 .
- “Nutrition and Productivity in Guatemala: Some Empirical Evidence,” 1994. Seminar, Humphrey Institute Seminar Series, February 11.

- “Issues in Global Environmental Sustainability,” 1994. Workshop, Department of Economics, Boston University, Boston, MA, November 9-10.
- “Integrating Concepts of Sustainable Development into Economic Policy and Planning,” 1993. The Cargill Lecture, Department of Economics, Macalister College, December 7.
- “Pesticide Policy and California Agriculture’s Changing Comparative Advantage, 1992. Invited Lecture, Department of Economics, University of Verona, Verona, Italy, February 16.
- “Sustaining Irrigated Agriculture in California’s San Joaquin Valley,” 1990. Invited lecture, Morrison Institute Seminar Series on Water Quality and Land Degradation, Stanford University, April 26.
- “The Economics of Information in Regulatory Decision Making,” 1990. Seminar, Resources for the Future, Washington, D.C. April 9.
- “How Safe is Our Food?” 1989. Keynote Address, Western Legislative Conference, Monterey, California, November 13-15.
- “Confidence in Food Safety,” 1989. Keynote Speaker, Pesticide Residue Workshop. California Department of Food and Agriculture and the University of California, Davis, Sacramento, CA, February 21 -23.
- “How Safe is Safe: A Public Policy Quandary,” 1989. Invited Speaker, Southern California Food Industry Conference, Davis, California, January 24-25.
- “How Safe is Safe: A Public Policy Quandary,” 1989. Invited Speaker, Western Food Industry Annual Conference, Davis, California, March 28-29.
- “Resisting Economics in Resistance Management: EPA’s Role in Managing Pesticide Resistance,” 1988. Invited Scientist Series, California Department of Food and Agriculture, Division of Environmental Monitoring, Sacramento, California, October 5.
- “Agricultural Chemical Regulation: A California Point of View,” 1988. Invited Speaker. Seminar on Regulatory Affairs, University of California, California Department of Food and Agriculture and the Western Agricultural Chemical Association, Sacramento, California, July 19-20.
- “Are Pesticides Economical?” 1987. Invited Speaker, Sacramento Economics Roundtable, Press Club, Sacramento, California, September 17.

“Challenges of Immigration Policy to California Agriculture,” 1987. Invited Address, Commonwealth Club of San Francisco, February 12.

PAPERS UNDER REVIEW

“The Environmental Kuznets Curve: An Empirical Analysis for Central and Eastern European Transition Economies.” (Invited for submission to *International Journal of Environmental Economics*)

WORKING PAPERS AND PAPERS IN PROGRESS

“Benefit-Cost Analysis in US Regulatory Decision,” September 1998. *Working Paper*. Center for International Food and Agricultural Policy, University of Minnesota, Department of Applied Economics, 1994 Bufford Avenue, St. Paul, Minnesota, 55108.

Western Water Policy and Regional Economic Adjustment (working title for draft book manuscript).

“Modeling Gains-from-Trade in Water Use Rights with Multiple Supplies: Implications for Water Market Development and Groundwater Management Policy,” (in progress)