

VITA
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PROFESSIONAL EMPLOYMENT

August 2002 – present: Professor (since 2003) & Associate Professor, Department of Economics, California State University, Long Beach, Long Beach, CA 90840-4607.

Executive Director (2017 – present), Western Economic Association International

Director, Institute for Innovation & Entrepreneurship (2017 – present)

Director, Office of Economic Research (2015 – present)

Chair, Department of Economics (2010 – 2016)

Editor-in-Chief, *Contemporary Economic Policy*, Wiley-Blackwell Publishing, (2005-2011).

Associate Director, Masters of Global Logistics program, CSULB (2010-2012)

July 1989 – August 2002: Associate & Assistant Professor, Director: Environmental Policy Center, Division of Economics & Business, Colorado School of Mines, Golden, CO 80401-1887.

August 1995 - July 1996: Visiting Scholar, Harvard Institute for International Development, Harvard University, 1 Eliot Street, Cambridge, MA 02138.

March - April 1996: Visiting Professor, Center for Economic Research and Graduate Education, (CERGE-EI) Charles University, Prague, The Czech Republic.

Sept 1984 - June 1989: Instructor & Assistant Professor, Economics Department,
University of Michigan-Flint, Flint, MI.

May 1988 - April 1989: Visiting Economist, Regulatory Impacts Branch, Office of Toxic
Substances, US Environmental Protection Agency, Washington, DC (IPA
Research Contract)

Jan - May 1988: Visiting Assistant Professor, School of Natural Resources, University
of Michigan, Ann Arbor, MI

EDUCATION

Ph.D. Economics, University of New Mexico, Albuquerque, NM, December 1985.
FIELDS: Applied Microeconomics, Environmental Economics, Natural
Resources

B.S. Economics & History, Southern Oregon State College (now Southern Oregon
University), Ashland, OR, June 1977.

PUBLICATIONS

Refereed Journals

“Impact of Wildfires and Floods on Property Values: A Before and After Analysis”,
Singapore Economic Review, 2016, v. 61(1), March. DOI: 10.1142/S0217590816400026 1640002
(with W. Athukorala, P. Neelawala, D. Rajapakse, C. Wilson)

“The Role of Risk Perceptions in the Risk Mitigation Process: The Case of Wildfire in
High Risk Communities”, *Journal of Environmental Management*. 91(2), 2009, pp. 489-498.
(with I. Martin, B. Kent) DOI: 10.1016/j.jenvman.2009.09.007.

“Modeling Conflict using Spatial Voting Games”, *International J. of Global
Environmental Issues*, 2002. (with H. Bender)

“The Role of Values and Objectives in Communicating Indicators of Sustainability”,
Ecological Indicators, 2(1-2), 2002. (with D. Shields, S. Solar)

“Evaluating the Accuracy of the Benefit Transfer Method: A Rural Water Supply
Application”, *J. of Environmental Management*, 2001. (with S. Piper)

“Stakeholder Objectives for Public Lands: Rankings of Forest Management
Alternatives”, *J. of Environmental Management*, 58(1), 2000, pp. 21-32. (with H. Bender, D.
Shields)

“Assessing the Financial and Economic Feasibility of Rural Water System

Improvements” *Impact Assessment and Project Appraisal*, 17(3), September 1999, pp. 171-82. (with S. Piper)

“Modeling Public Land Use Decisions as a Cooperative Game” *International Journal of Environment & Pollution*, 12(2/3), 1999, pp. 217-231. (with H. Bender)

“Resource Taxation and Sustainability: A CGE Model of the Czech Republic” *Nonrenewable Resources*, 7(4), 1998, pp. 289-302. (with R. Skinner)

“Household Willingness to Pay for Improved Rural Water Supplies: A Comparison of Four Sites” *Water Resources Research*, 33(9), Sept. 1997, pp. 2153-63. (with S. Piper)

“An Application of Health-Health Analysis: Crystalline Silica Regulation in California” *Journal of Environmental Management*, 49(2), February 1997, pp. 245-59. (with J. Tilton)

"An Application of Social Choice Theory to U.S. Forest Service Decision Making" *Journal of Policy Modeling*, 18(6), December 1996, pp. 603-21. (with B. Tolwinski, D. Shields, B. Kent)

"Optimal Production & Reclamation at a Mine Site with an Ecosystem Constraint", *Journal of Environmental Economics & Management*, 30(2), March 1996, pgs 186-98. (with P. Roan)

"Environmental Regulation of the Mining Industry: A Comparison of Chile and the U.S." *Natural Resources Forum*, 19(4), November 1995, pp 297-307. (with F. Azocar)

"International Negotiations on Carbon Dioxide Reductions: A Dynamic Game Model", *Group Decisions & Negotiations*, 4(1), January 1995. (with B. Tolwinski)

"A Dynamic Game of a Transboundary Pollutant with Asymmetric Players", *J. of Environmental Economics & Management*, 25(1), July 1993 pp 1-12. (with R. Patrick & B. Tolwinski)

"Estimating Welfare Effects of Asbestos Regulation", *Journal of Environmental Management*, 31, October 1990. (with F. Arnold & C. Augustyniak)

"Water Rights Markets: Social & Legal Considerations", *American Journal of Economics & Sociology*, 49(1), January 1990. (with V. Brajer)

"Allocating a Scarce Resource: Water in the West", *American Journal of Economics & Sociology*, 48(3), July 1989. (with V. Brajer)

"Management of a Tributary Aquifer", *Water Resources Research*, 24(8), August 1988. (with S. Burness)

"Conjunctive Use of a Tributary Aquifer: A New Mexico-El Paso Case", *Southwestern Review of Economics & Management*, 5(1), Spring 1986.

Books & Book Chapters

"Impact of Natural Disasters on Residential Property Values: Evidence from Australia", in *Economics of Natural Disasters*, World Scientific, 2018. (with Athukorala et al.)

"Disasters and Social Marketing", *Handbook of Persuasion and Social Marketing*, David Stewart, ed., Praeger Press: New York, 2015. pp. 77-116 (with I. Martin et al.)

Wildfire Risk: Human Perceptions and Management Implications, Wade E. Martin, Carol A. Raish and Brian Kent, editors, Washington DC: RFF Press, 2008.

Valuing the Health Effects of a Prescribed Fire, In *Wildfire Risk: Human Perceptions and Management Implications*, Wade E. Martin, Carol A. Raish and Brian Kent, editors, Washington DC: RFF Press, 2008 (with V. Brajer & K. Zeller).

"Cultural Variation in Public Perceptions Concerning Fire Use and Management" (2007), Carol Raish, Armando Gonzalez-Caban, Wade E. Martin, Ingrid M. Martin, and Holly Bender, in *People, Fire, and Forests*, Terry C. Daniel, Matthew Carroll, Cassandra Moseley, and Carol Raish (Eds.), Oregon State University Press, 2007.

"National Assessment Methodologies and Measures", in *Sustainable Development and the Future of Mineral Investment*, J. Otto, ed., United Nations Publications, 2000.

"Environmental Regulation of the Mining Sector: The U.S. Experience", *Economic Rents and Environment in Mining and Natural Resources*, Eugenio Figueroa, editor, The University of Chile and The University of Alberta, 1999.

Modeling Environmental Policy, Kluwer Academic Publishers: Amsterdam, W.E. Martin & L.A. McDonald, editors, 1997.

"Modeling Environmental Policy: An Introduction", in *Modeling Environmental Policy*, W. Martin & L. McDonald, eds. Kluwer Academic Publishers: Amsterdam, 1997, pp. 1-5. (with L. McDonald).

"Modeling Ecosystem Constraints under the Clean Water Act: An Application to the Clearwater National Forest," in *Modeling Environmental Policy*, W. Martin & L. McDonald, eds. Kluwer Academic Publishers: Amsterdam, 1997, pp. 77-102. (with P. Roan)

Environmental Economics & the Mining Industry, Kluwer Academic Publishers: Amsterdam, W.E. Martin, ed., 1993.

"Cost of Compliance: Impact of Environmental Requirements on Mining Economics", in *Mining Environmental Handbook*, Imperial College Press: London, 1996. (contribution to chapter edited by P. Keppler)

"A Case Study of Environmental Compliance Effects for the Alaska-Juneau Mine", in *Mining Environmental Handbook*, Imperial College Press: London, 1996. (contribution to chapter edited by F. Banta, with L. McDonald)

"The Effects of Global Warming on the Mining Industry: Issues, Tradeoffs & Options", in *Environmental Economics & the Mining Industry*, W.E. Martin, ed., Kluwer Academic Publishers: Amsterdam 1993. (with H.S. Burness)

Water & Poverty in the Southwest: Conflict, Opportunity, & Challenge, University of Arizona Press, Tucson, 1987. F.L. Brown, H. Ingram. (Contributor to the volume)

Proceedings (Refereed)

"The Influence of Social Media in Creating 2-Way Risk Communication", Ingrid Martin, David Horne, Roger Sutton, (2012), **Proceedings of the 3rd Human Dimensions of Wildland Fire**, April 17-19, 2012, Seattle, WA.

"Understanding Disaster Subcultures as a Means to Increase Risk Mitigation Efforts", Ingrid M. Martin, Wade E. Martin, Carol Raish, (2008), **Winter American Marketing Association Proceedings**, Austin, TX, 102-103.

"Do Risk Perceptions and Experience Influence Risk Mitigating Behaviors?", (2007), Ingrid M. Martin, Wade E. Martin, and Brian Kent, **Marketing & Public Policy Conference Proceedings**, 32-33, Washington, D.C.

"What Motivates Individuals to Protect Themselves from Risks? The Case of Wildland Fires", (2006), **Marketing & Public Policy Conference Proceedings**, 44-45.

"Including the Public's Voice in the Decision Making Process: The Case of Fire Management within the U.S.D.A. Forest Service", Proceedings: Western Decision Science Institute, Kauai, Hawaii, April 15-19, 2003.

"A Role for Values in Evaluating Sustainability" Proceedings: INDEX2001-Quality of Life Indicators, Rome, Italy, October 4-6, 2001.

"The Impact of Goals on the 'Values→Attitudes→Behaviors' Framework" Proceedings: Decision Science Institute, Las Vegas, NV, November 1998. (with I. Martin, H. Bender, D. Shields: **awarded best paper on environmental issues**).

"Ecosystem Management of Public Lands", Proceedings: MEMS Third Annual Meetings, Washington, DC, March 1994.

The Impacts of the Environmental Compliance Process on Mine Development in the Western United States", Proceedings: Rocky Mountain Association of Environmental Professionals, Denver, CO, September 1993. (with L. McDonald)

"A Conceptual Framework for Incorporating Environmental Issues into Gold Mine Development Decisions", Proceedings: Rocky Mountain Association of Environmental Professionals, Denver, CO, September 1993. (with J. Casey & M. Walls)

"Market Incentives", Proceedings: International Conference on Pollution Prevention in Mining & Mineral Processing, Snowmass, CO, August 1993.

"A Group Decision Analysis of U.S. Forest Service Ecosystem Planning", Proceedings: APCOM XXIV, Jorgen Elbrond & Xialoi Tang, eds., Montreal, Quebec, November 1993. (with B. Tolwinski)

"Water & Poverty in the Southwest", Proceedings: Seminar on Poverty, Resources for the Future, Washington, DC, 1983. (with F.L. Brown, *et al.*)

Research Reports

Refereed:

"A Qualitative and Quantitative Analysis of Risk Perception and Treatment Options as Related to Wildfires in the USDA FS Region 3 National Forests", Sept. 2011. Gen. Tech. Rep. RMRS –GTR-260, Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 57p. (with I. Martin, C. Raish)

"Hayman Fire Analysis Project Final Report: Social/Economic Team," Final Report to Congressional Review Panel, Congressman Mark Udall. Rocky Mountain Research Station, Ft. Collins, Colorado. (with B. Kent et al.)

"Survey results of the American public's values, objectives, beliefs, and attitudes regarding forests and grasslands: A technical document supporting the 2000 USDA Forest Service RPA Assessment. 2002." Gen. Tech. Rep. RMRS-GTR-95. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 111p. (Shields, Deborah J.; Martin, Ingrid M.; Martin, Wade E.; and Haefele, Michelle A.)

"Including the public's voice in the decision making process: the case of fire management within the U.S.D.A. Forest Service", 2002. Preliminary report for the Rocky Mountain Research Station, Ft. Collins, CO. (Martin, Wade E., Martin, Ingrid M. and Kent, Brian)

"Ecosystem Management and Mine Permitting on Public Lands", U.S. Bureau of Mines Open File Report #78-95, April 12, 1995 (with L. McDonald).

"Environmental Compliance in the Mine Permitting Process: Case Studies from Alaska, Colorado, Montana and Nevada", U.S. Bureau of Mines Open File Report #51-95, July 26, 1994 (with L. McDonald)

"Regulatory Efficiency of Environmental Compliance in the Mine Permitting Process: Analysis of Alaska, Colorado, Montana & Nevada", U.S. Bureau of Mines Open File Report #50-95, September 9, 1994 (with L. McDonald)

"Environmental Compliance Requirements and Production Impacts for Mines in Southeast Alaska-A Preliminary Review", US Bureau of Mines Open File Report #92-105, Juneau, AK, Sept. 1992 (with L. McDonald)

Non-referred:

"Public Input Concerning Fire and Fuels Management in Region Three: Results from the Santa Fe National Forest." Rocky Mountain Research Station, USDA Forest Service, Albuquerque, New Mexico.

"Public Input Concerning Fire and Fuels Management in Region Three: Results from the Kiowa National Grasslands." Rocky Mountain Research Station, USDA Forest Service, Albuquerque, New Mexico.

"A review of selected studies on the valuation of information". Submitted to US Environmental Protection Agency, Office of Environmental Information, Washington DC. Contract #2W-1348-NALX. (January 2003).

"Mid-Project Evaluation Report: MedPolicies Initiative", World Bank and Harvard Institute for International Development, April 2000.

"State of the Environment in the CEE and NIS Countries", U.S. Agency for International Development, through the Harvard Institute for International Development, November 1997.

"An Economic Analysis of Regulating Crystalline Silica," prepared for California Mining Association, Sacramento, California, July 1994. (with J. Tilton)

"The Joint Application of the National Environmental Policy Act and the California Environmental Quality Act to Mining: A Case Study of the Hayden Hill Mine", Sept. 1993, AMAX Gold, Inc., Golden, CO (with M. Walker)

"Valuing Natural Environments Using the Opportunity Cost Methodology: An Artificial Wetlands Case", US EPA contract #68-D9-0169, 1990.

"Review of Methodologies for Valuing Non-Market Environmental Goods", US EPA contract #68-D9-0169, 1990.

"Valuing Environmental Goods Within the Office of Toxic Substances", US EPA contract #68-02-4283, 1990.

"Employment Characteristics of the Genesee County Population", 1987 Genesee County Database Report, Project for Urban & Regional Affairs, University of Michigan-Flint.

An Economic Analysis of the Black Population of Genesee County, Report for the Urban League of Flint, Flint, MI, 1987.

"Analysis of the Working Age Population", 1986 Genesee County Database Report, Project for Urban & Regional Affairs, University of Michigan-Flint.

"Economic Projections: 1982-2002", Bureau of Business & Economic Research, University of New Mexico, 1982.

Book Reviews

Environmental Valuation, Economic Policy and Sustainability: Recent Advances in Environmental Economics, Melinda Acutt and Pamela Mason, eds., for *The Journal of Energy and Development*, forthcoming.

Mining and the Environment: Case Studies from the Americas, Alyson Warhurst, ed., for the *Natural Resources Forum*, forthcoming.

Compensation for Regulatory Takings: An Economic Analysis with Applications, Thomas J. Miceli and Kathleen Segerson, JAI Press, Inc., for *Journal of Economic Literature*, v. XXXV(4), December 1997.

"A Survey of Selected Works in Environmental Economics: Part II" *The Journal of Energy and Development*, v. 22(2), Spring 1997, pp. 285-300.

"A Survey of Selected Works in Environmental Economics: Part I" *The Journal of Energy and Development*, v. 22(1), Autumn 1996, pp. 135-42.

Valuing Natural Assets: The Economics of Natural Resource Damage Assessment, Raymond J. Kopp and V. Kerry Smith, eds., Resources for the Future, Washington, DC, for *Journal of Energy and Development*, v XX(1), Autumn 1994.

The Measurement of Environmental and Resource Values: Theory and Methods, A. Myrick Freeman III, Resources for the Future, Washington, D.C., for *Journal of Energy and*

Development, v XIX(2), Spring 1994.

Cost-Benefit Analysis of Environmental Change, Per-Olov Johansson, Cambridge University Press, London, UK, for *Journal of Energy and Development*, v XIX(2), Spring 1994.

Environomics: The Economics of Environmentally Safe Prosperity, Farid A. Khavari, Praeger Publishers, Westport, CT, for *Journal of Energy and Development*, v XVIII, Spring 1993.

Economic Valuation of Natural Resources, edited by Rebecca Johnson & Gary Johnson, Westview Press, Boulder, CO, for *Natural Resources Forum*, v 15(4), November 1991.

Public Expenditures: The Theory and Application of Cost Benefit Analysis, T.F. Nas, for Sage Publications, 1994.

Public Policies for Environmental Protection, edited by Paul Portney, Resources for the Future, Washington DC, for *Resources Policy*, v 17(1), March 1991.

Principles of Economics, A. Thompson, for Addison-Wesley, 1986.

PROFESSIONAL PRESENTATIONS

“Valuing Bushfire Risk to Homeowners of Brisbane, Australia: A Choice Experiment”, WEAI 13th International Conference, Newcastle, Australia, January 14, 2018. (with T. Kularatne, C. Wilson)

“Impact of Wildfires and Floods on Property Values: A Before and After Analysis”, WEAI 11th International Conference, Wellington, New Zealand, January 9, 2015. (with W. Athukorala, P. Neelawala, D. Rajapakse, C. Wilson)

“California Water Issues and the Agricultural Sector”, United Ag Annual Meeting & Conference, January 28-30, 2014.

“Impact of Natural Disasters on Property Values: A Before and After Analysis”, Western Economic Association International, San Francisco, July 1, 2012.

“Valuing Bushfire Risk to Homeowners: A Hedonic Property Value Study in Queensland Australia”, International Association of Wildland Fire, Human Dimensions Conference, Seattle, WA, April 2012.

“A Regional Multi-sector CGE Model of Southern California: Evaluating Climate Change Regulation”, National Urban Freight Conference, Long Beach, CA October, 2009.

“A CGE Model of Southern California: An Analysis of Climate Change Policy”,

National Urban Freight Conference, Long Beach, CA, December 2007.

“Wildfire Risk”, National Wildland Fire Association, Ft. Collins, CO, October 2007.
Organized session and presented paper. (with C. Raish et al.)

“Integrating Local and traditional Ecological Knowledge in Resource Management”,
International Society for the Study of Resource Management, Park City, Utah, March 2007.
(with C. Raish et al.)

“Homeowner Behaviors and Wildfire Risk Perceptions”, Western Economic Association
International meetings, Vancouver, BC, July 2, 2004. (Also presented at California State
University, Fullerton, April 23, 2004, Society for Risk Analysis, annual meeting, 2004,
University of California, San Diego, 2005).

“Cultural Variation in Public Perceptions Concerning Fire Use and Management”, 10th
International Symposium on Society and Resource Management, Keystone, CO, June 2-6, 2004.

“Using Benefit-Cost Analysis for Environmental Regulations: The Case of Mining and
Oil & Gas”, Sustainable Development for Extractive Industries, Ministry of Environment,
Government of Indonesia, Jakarta. September 23, 2003.

“Benefit-Cost Analysis and Efficient Regulation”, Bandung Technology Institute and
Padjajaran University, Jakarta, Indonesia, September 24, 2003.

“Including the public’s voice in the decision making process: the case of fire
management within the U.S.D.A. Forest Service”, Western Decision Science Institute Annual
Meetings, Kauai, Hawaii, April 15-19, 2003.

“Conflicting Objectives for Mineral Resource Management: the case of aggregate
quarries in Slovenia”, Seventh International Symposium on Environmental Issues and Waste
Management in Energy and Mineral Production, Cagliari, Italy, October 7-10, 2002

“Balancing the costs and benefits of aggregate extraction in Slovenia: are existing data
adequate?”. In: Raw materials planning in Europe. Change of conditions!. New perspectives?.
Krefeld. Germany. Geologischer Dienst Nordrhein-Westfalen, October 4-6, 2002.

“Optimal Reservoir Management of the Upper Rio Grande”, Western Economic
Association International, Seattle, Washington, July 2002.

“A Logit Analysis of the Public’s Objective for the Use of Public Lands in the USA”, 2nd
World Congress, Association of Environmental and Resource Economists, Monterey, California,
June 2002.

“Resource Companies Reactions to Environmental Regulations”, Mineral Economics &
Management Society meetings, Montreal, Canada, April, 2002.

“A Role for Values in Evaluating Sustainability”, INDEX2001-Quality of Life Indicators, Rome, Italy, October 4-6, 2001.

“Applying Collaborative Objectives-Based Planning in National Forest Planning”
Community-based Collaborative Research Consortium, Las Vegas, NV, August 6-8, 2001.

Workshop on “Integrating Community Values in the Sustainable Use and Management of Natural Resources: An Approach for Business & Public Policy Makers”, Ninth Annual World Business Congress, San José, Costa Rica, December 14-17, 2000.

Workshop on “Including the Public in the Planning Process” at the American Society of Public Administrators annual meeting. San Diego, California, April 2000.

“The Impact of Goals on the ‘Values→Attitudes→Behaviors’ Framework” Decision Science Institute Annual Meetings, Las Vegas, NV, November 1998. (with I. Martin, H. Bender, D. Shields: **awarded best paper on environmental issues**).

“Concepts in Collaborative Stewardship: Sustainability, Feasibility and Acceptability”, INFORMS Meetings, Seattle, WA, October 1998.

“Environmental Regulation of the Mining Sector: The U.S. Experience”, presented at Manejo y Políticas Ambientales en la Minería, Department of Economics, University of Chile, Santiago, Chile, June 3, 1997

“The Effect of Revenue Recycling of Environmental Taxes in a Transition Economy: An Application to the Czech Republic”, presented at Optimization Days, École des Hautes Études Commerciales, University of Montreal, Montreal, Quebec, May 12-14, 1997.

“Modeling the NEPA Process for Mining on U.S. Forest Service Lands as a Dynamic Game”, presented at INFORMS, Atlanta, Georgia, November 4-6, 1996. (with L. McDonald)

“The Use of Tradable Permits for Controlling Air Pollution”, presented at The Economics University, Prague, The Czech Republic, April 9, 1996.

“Optimal Production & Reclamation at a Mine Site with an Ecosystem Constraint”, presented at the Harvard Institute for International Development, Harvard University, Cambridge, MA, November 22, 1995. (with P. Roan)

"Mine Permitting in the U.S.: Lessons for Chile", presented at MINERIA Y REGULACION DEL MEDIO AMBIENTE: □Armonía o Discordia?, University of Chile School of Law, Santiago, Chile, April 1994.

"Ecosystem Management of Public Lands", presented at the MEMS annual conference,

Washington, DC, March 1994.

"A Group Decision Analysis of U.S. Forest Service Ecosystem Planning", presented at the APCOM XXIV meetings, Montreal, Quebec, November 1993. (with B. Tolwinski)

"An Econometric Analysis of Consumer Supply of Recycled Materials From a Buy-Back Program", presented at the Western Economic Association meetings, Lake Tahoe, NV, June 1993. (with J. Peace)

"A Model of Environmental Regulation: A Case Study of Mine Permitting", presented at the Western Economic Association meetings, Lake Tahoe, NV, June 1993. (with L. McDonald)

"International Negotiations on Carbon Dioxide Reductions: A Dynamic Game Model", presented at the Fifth International Symposium on Dynamic Games and Applications, Grimentz, Switzerland, July 13-15, 1992. (with B. Tolwinski)

"Global Climate Change: Issues Involving Dynamic Game Modelling", presented at the ORSA/TIMS meetings, Orlando, FL, April 1992.

"Environmental Regulatory Effects on Utility Profitability and Direction", presented at the Advanced Workshop in Regulation and Public Utility Economics, Rutgers University, October, 1991. (with R. Patrick)

"Global Warming and Tax/Subsidy Implications", Western Economic Association Meetings, July 1, 1991, Seattle, WA. (with R. Patrick and B. Tolwinski)

"Stochastic Dynamic Games and Environmental Issues", International Conference on Game Theory, June 25-27, 1991, Florence, Italy. (with R. Patrick and B. Tolwinski)

"Modeling Global Warming as a Dynamic Game", European Association of Environmental and Resource Economists Conference, June 11-14, 1991, Stockholm, Sweden. (with R. Patrick and B. Tolwinski)

"Effects of a Carbon Tax on Global Warming", Seminar: University of Colorado, April 17, 1991, Boulder, CO. (with R. Patrick and B. Tolwinski)

"Valuing Non-Market Goods: A Wetlands Case Study", Seminar: University of Colorado, April 16, 1991, Boulder, CO.

"Economics and Environmental Policy Evaluation", Seminar: ENEA, April 1990, Rome, Italy.

"Incentives for Pollution Control Compliance Under Imperfect Information: The Composite Materials Case", Conference on Environmental Cooperation and Policy in the Single

European Market, April, 1990, Venice, Italy. (with R. Patrick)

"Valuing Non-Market Goods: A Wetlands Case Study", Seminar: U.S. Environmental Protection Agency, Region VIII, March, 1990, Denver, CO.

"The Effects of Global Warming on the Mining Industry: Issues, Trade-offs, and Options", *John M. Olin Distinguished Lecture Series: Mining and the Environment*, April 1990, Colorado School of Mines, Golden, CO. (with H. Burness)

"Welfare Measures from Asbestos Regulation", Eastern Economics Association Meetings, March 1989, Baltimore, MD. (with F. Arnold and C. Augustyniak)

"Experimental Tests of Bargaining: The Coase Propositions", Eastern Economics Association Meetings, March 1988, Boston, MA. (with R. Patrick)

"Allocating Scarcity: Western Water", Western Economic Association Meetings, July 1986, San Francisco, CA. (with V. Brajer)

PROFESSIONAL ACTIVITIES

Presented the Regional Economic Forum for 2016 and 2017 in Long Beach. This is a state of the economy presentation presented annually to the local business, government and citizens of the region.

Economic analysis of the Long Beach Airport Customs Facility. Project estimated the impact on the regional economy of allowing international flights at the Long Beach Airport, 2017.

Review of "Russian River Independent Science Review Panel Conceptual Model of Watershed Hydrology, Surface Water and Groundwater Interactions and Stream ecology for the Russian River" for Sonoma County Water Agency and Mendocino County Flood Control and Water Conservation District. January 2016.

Principle Investigator on multi-disciplinary project to develop a learning community on sustainability and sustainable development at California State University, Long Beach. Competitive grant from California State University Chancellor's Office of Sustainability (2013-14). (\$12,000)

Principle Investigator for CalRecycle project on the Economic and Life-cycle Analysis of used oil management in the state of California based on SB546. (A subcontract through UCSB, 2012-13) (\$82,000)

Principle Investigator on Risk Communication, Climate Change and Homeowner Behaviors to Mitigate Wildfire Risk. Research stimulation grant from CSULB (2011).

(\$12,000)

Principle Investigator on a METRANS (US Department of Energy) grant to evaluate various environmental policies using a computable general equilibrium model. This project is designed to capture the impacts of environmental policies focusing on air pollution resulting from the transportation of goods from the port of Long Beach. (2006- 2009) (\$220,000)

Project researcher to evaluate the nonmarket health benefits from the use of magnetic levitation rail options for the movement of container cargo from the ports of Los Angeles and Long Beach to various locations. (2007 – 2008)

Project with the Ministry of Environment, Government of Indonesia on the use of benefit-cost analysis in evaluating environmental regulations. This project focuses on introducing BCA to the staff of the Ministry and working with extractive industries that are being regulated in Indonesia. (2004)

Member of an advisory panel established by the USDA Forest Service at the request of the US Congress to review the environmental and human impacts of the Hayman Fire on the Front Range of Colorado. (2002-2003)

Principle Investigator on a USDA Forest Service project that is evaluating the human dimension of fire management options in Region 3 (New Mexico and Arizona). This project is designed to evaluate the public's response to various treatment options for reducing the risk of catastrophic fire. (2003 - ongoing)

Principle Investigator on a research project with the Rocky Mountain Research Station for the USDA Forest Service that is evaluating various risk communication tools for informing the public about the potential danger of fuel loadings on public lands. A survey of the public is used to determine the public's tradeoffs between various levels of risk and the other attributes of the forested landscape. The data are analyzed using conjoint analysis. (2002 - ongoing)

The Office of Environmental Information at the U.S. Environmental Protection Agency is attempting to value the Toxic Release Inventory database. This project will review the options available for valuing the database and design a study to be undertaken during the next fiscal year. (2003)

Principle Investigator on a USDA Forest Service project that is integrating the objectives based planning method with a collaborative learning process. This project is being applied to the Grand Mesa, Uncompahgre and Gunnison National Forests plan revision process in Southwestern Colorado and is being considered as a model for other forests. (2001-2003)

Principle Investigator on a USDA Forest Service project studying the human dimension of fire management options. This project evaluates the tradeoffs that individuals are willing to make between forest conditions, risk levels and treatment options using conjoint analysis. (2001-

2003)

Principle Investigator on a USDOJ Bureau of Reclamation project for upper Rio Grande watershed. This project is using dynamic modeling to determine the optimal reservoir management strategies for the upper Rio Grande watershed. (2000-2002)

Guest editor for special issue on conflict resolution/conflict management for the *International Journal of Global Environmental Issues*.

Evaluator for a World Bank project on environmental policy for thirteen countries in North Africa, the Middle East, and Central and Eastern Europe. This activity involved a mid-project evaluation of the environmental support program implemented by the Harvard Institute for International Development. (1998)

Provide research support for the USDA Forest Service in the development of their National Strategic Plan under the Government Performance and Results Act of 1993. This work is designed to provide input to the Forest Service regarding stakeholder preferences for the multiple uses of the Forest Service lands. (1998-2002)

USAID project to determine the role USAID should take in Central and Eastern Europe and the Newly Independent States beyond the year 2000, specifically, with respect to environmental projects and activities.

Program Chair for the annual meetings of the Mineral Economics and Management Society, Boulder, Colorado, February 1997.

Session chair for Environmental Policy Modeling session at the INFORMS meeting in Atlanta, Georgia, November 1996.

Discussant at the Advanced Workshop in Regulation and Public Utility Economics, Center for Research in Regulated Industries, Rutgers University, Lake George, NY, May 29-31, 1996.

USAID Evaluation Team: Member of a three-person team contracted to conduct a mid-project evaluation of the Harvard Institute for International Development Central and East European Environmental Economics Project funded by USAID. This project involved extensive travel in the region to interview host country officials, local USAID personnel, and HIID employees as well as USAID/Washington and HIID/Cambridge project personnel. September to November 1995.

Discussant: "The Value of International Cooperation in Abating Global Climate Change" James Hammitt & John Adams, American Economic Association Meetings, Washington DC, January 6-8, 1995.

Program Committee, 1994 Annual Meetings of the National Association of Environmental Professionals. New Orleans, LA, June.

Chairperson: "Natural Resource Modeling Issues" at the American Economic Association Meetings, January 4-6, 1994.

Colorado River Decision Support System Advisory Committee, *ex officio* member. Advise on project for developing a computer model for decision support on the use of the Colorado River under the Law of the River (1995 to 2000).

Co-Editor, special issue of *Journal of Energy & Development* on energy and the environment, v. 17(1), Autumn 1991.

Assistant Editor, *Southwestern Review of Economics & Management*, 1983-4.

Referee & Reviewer for:

National Science Foundation
US DOI Joint Fire Science Program
US Department of Energy
Bureau of Reclamation
Journal of Environmental Economics & Management
Journal of Environmental Management
International Economic Review
The Australian Economic Review
Ecological Economics
Water Resources Research
Water Resources Management
Resources & Energy Economics
Resources Policy
Sustainability
Natural Resources Forum
Natural Hazards Review
Policy Studies Journal
Southwestern Review of Economics & Management
Journal of Energy & Development
The Scandinavian Journal of Economics
Interfaces
Environmental Modeling & Assessment
Contemporary Economic Policy
Ground Water
Resources, Conservation & Recycling
Journal of Bioeconomics
Risk Analysis
Economic Analysis and Policy

PROFESSIONAL MEMBERSHIPS

American Economic Association
Association of Environmental & Resource Economists
European Association of Environmental & Resource Economists
Latin American & Caribbean Association of Environmental & Resource Economists
International Society of Ecological Economics
Western Economic Association International

AWARDS & HONORS

Visiting Scholar, Harvard Institute for International Development, Harvard University, 1995-96.
Domingo Moreno Developmental Professor, Colorado School of Mines, 1992-93
Distinguished Junior Faculty Award, Oak Ridge Institute for Science & Education, U.S. Bureau of Mines, 1992-94
Professor of the Year, 1990-91; 1991-92; & 1993-94, Mineral Economics Department, Colorado School of Mines.
Omicron Delta Epsilon

REFERENCES Available upon request.