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## **ACADEMIC EXPERIENCE**

Associate Professor of Economics Graduate Director, Department of Economics Assistant Professor of Economics Department of Economics, UNIVERSITY OF NEW MEXICO, Albuquerque, New Mexico	July 2000-present: August 2003-present: August 1995-June 2000:
Visiting Scholar Department of Finance and Economics Rutgers Business School – Newark and New Brunswick RUTGERS UNIVERSITY, New Jersey	Fall 2001
Assistant Professor of Economics Defense Resources Management Institute, NAVAL POSTGRADUATE SCHOOL, Monterey, California	August 1992-August 1995:
Postdoctoral Research Associate Research and Teaching Assistant Mineral Economics Department, COLORADO SCHOOL OF MINES, Golden, Colorado	May 1991-July 1992: May 1988-May 1992:
Adjunct Instructor Department of Economics, METROPOLITAN STATE COLLEGE, Denver, Colorado	August 1990-May 1991:

## **FORMAL EDUCATION**

Ph.D., Mineral Economics, 1991, Colorado School of Mines, Golden, Colorado  
M.S., Mineral Economics, 1988, Colorado School of Mines, Golden, Colorado  
B.A., Geology, 1979, Western State College, Gunnison, Colorado

## **RESEARCH and TEACHING INTERESTS**

Natural Resource and Environmental Economics (emphasis in water and energy) and Applied Microeconomics

**PROFESSIONAL PUBLICATIONS*****Refereed Journal Articles:***

“Economics of Transboundary Aquifer Management,” with R.H. Patrick and D.S. Brookshire, *Ground Water*, 43(5): 731-36, 2005.

“Western Municipal Water Conservation Policy: The Case of Disaggregated Demand,” with H.S. Burness and K. Krause, *Water Resources Research*, 41(3): 2005.

“Water Use in a Mountain Front Recharge Aquifer,” with S. Burness and D. Brookshire, *Water Resources Research*, 40(6): 2004.

“The Demand for Water: Consumer Response to Scarcity,” with K. Krause and D. Brookshire, *Journal of Regulatory Economics*; 23(2): 167-191, 2003.

“Comparing Tests of the Theory of Exhaustible Resources,” with R.H. Patrick, *Resource and Energy Economics*; 24:301-325, 2002.

“Western Urban Water Demand,” with S. Burness, D. Brookshire, and K. Krause, *Natural Resource Journal*; 42(4):1-26, 2002.

“Individual Responses and Intergenerational Common Pool Problems,” with K. Krause, *Journal of Environmental Economics and Management*; 43:47-70, 2002.

“A Microeconometric Test of the Theory of Exhaustible Resources,” with R.H. Patrick, *Journal of Environmental Economics and Management*; 42:82-103, 2001.

“Marketing Western Water: Can a Process Based Geographic Information System Improve Reallocation Decisions?” with O.P. Mathews, L. Scuderi, D. Brookshire, K. Gregory, S. Snell, K. Krause, B. Cullen, and M. Campana, *Natural Resources Journal*: 41(2):329-371, 2001.

“A Hybrid Economic-Engineering Model for Natural Gas Production,” with J. Crafton, S.M. Norquist, and R.H. Patrick, *Energy Economics*; 21: 67-94, 1999.

“Order 636 and the Natural Gas Industry,” *Resources Policy*; 24(2): 207-16, 1998.

“A New Look at a New Discount Rate,” with J.K. Lowe and N.J. Webb, *Armed Forces Comptroller*; 42(1):27-32, 1997.

“The Economic Possibilities of Natural Gas Conservation: Antithetical Results of Prorating Regulation,” *Journal of Regulatory Economics*; 10:147-163, 1996.

"*The Emerging New Order in Natural Gas Markets versus Regulation* by A.S. DeVany and W.D. Walls," *Journal of Economic Literature*; XXXIV (June):798-800, 1996.

“A Well-Based Cost Function and the Economics of Exhaustible Resources: The Case of Natural Gas,” with R.H. Patrick, *Journal of Environmental Economics and Management* 28:174-189, 1995.

“Technological Advancement and the Recovery of Natural Gas: The Value of Information,” with R.H. Patrick, *The Energy Journal*; 16(1):113-35, 1995.

“Emerging Environmental Markets: Improving the Competitiveness of Natural Gas,” *The Energy Journal*; 15(3):75-91, 1994.

“Political Risk Analysis: Past and Present,” *Resources Policy*; 18(3), 167-78, 1992.

### **Book Chapters:**

“Conceptual Issues of Benefit Transfers and Integrated Modeling,” with D. Brookshire, in *Environmental Value Transfer: Issues and Methods*, Eds. S. Navrud, R. Ready and O. Olvar, in the Kluwer Academic Publishers series entitled *The Economics of Non-Market Goods and Resources*, April 2007.

“Uncertainty, Benefit Transfers, and Physical Models: A Middle Rio Grande Valley Focus,” with D. Brookshire and R. DeSimone, in *Environmental Value Transfer: Issues and Methods*, Eds. S. Navrud, R. Ready and O. Olvar, in the Kluwer Academic Publishers series entitled *The Economics of Non-Market Goods and Resources*, April 2007.

Reallocation of Water and the Hydrological Effects of Climate Change: the Upper Rio Grande Basin, Southwestern USA with M. Campana, L. Scuderi, O.P. Matthews, D. Brookshire, K. Krause, B. Cullen, S. Snell and K. Gregory, in *Water Resources Perspectives: Evaluation, Management and Policy*, A. S. Alsharhan and W.W. Wood, (eds.), *Developments in Water Science* 50, Elsevier, Amsterdam, pp. 169-181, 2003.

“Integrated Modeling: Data Transfers from the Physical And Social Sciences, with D. Brookshire, in *First International Symposium on Transboundary Water Management*, eds. A. A. Aldama, J. A. Mijares, R. Equihua, AMH-IMTA, 2002.

“Borders Crossing Borders: Efficiency and Equity Considerations of Groundwater Markets in the Ciudad Juárez/El Paso Region Along the Mexico/United States Border,” with D. Brookshire and M. Ewers, *The 46<sup>th</sup> International Seminar On Nuclear War and Planetary Emergencies* 2002.

"Incentives in Pipeline Pricing and Capacity," in *Incentive Regulation for Public Utilities*, with R.H. Patrick, edited by M.A. Crew, Kluwer Academic Publishers, Boston: 157-184, 1994.

***Reports:***

“Fully Integrated System Dynamics Toolbox for Water Resources Planning: Economic Components,” with D. Brookshire, J. Thacher, K. Grimsrud. Sandia National Laboratories: 2006.

“Faculty Compensation at UNM: Is the Reward System Equitable?” with M. Binder, K. Krause, and J. Thacher, prepared for the Provost of the University of New Mexico, 2006.

“Water Prices in New Mexico,” with J.K. Hansen, prepared for the Office of the State Engineer, 2006.

“A Quantitative Assessment of the Economic and Institutional Impacts of Climate Change on the Upper Rio Grande Valley Using an Integrated Geographic System,” with L. Scuderi, O.P Matthews, D. Brookshire, M. Campana, National Science Foundation: 2004.

“An Integrated GIS Framework for Water Allocation and Decision-Making in the Upper Rio Grande Valley,” with L. Scuderi, O.P Matthews, M. Campana, D. Brookshire and K. Krause for the U.S. Environmental Protection Agency, 2004.

“The Impact of Heterogeneous Consumer Response on Water Conservation Goals,” with Kate Krause, Technical Completion Report No. 315 for the Water Resource Research Institute: 2001.

“Preparing for a Changing Climate,” (P.I. W.A. Sprigg) report prepared for the U.S. Global Change Research Program, <http://www.ispe.arizona.edu/research/swassess/report.html>: 2000.

“The Economics of Technology Research and Development: Recovery of Natural Gas from Tight Sands,” with R.H. Patrick for the Gas Research Institute, Report No. GRI-92/0267: Washington, D.C.: National Technical Information Service: 1992.

***Conference Proceedings:***

“Urban Water Pricing: A Historical Perspective and the Challenges for the Future,” Proceedings of the 50<sup>th</sup> Annual New Mexico Water Conference, 2005.

“Measuring Transfer Prices, Option Values, and Pollution Control Costs with Limited Information,” with R.H. Patrick. Proceedings of the 13<sup>th</sup> Annual Conference of the European Association of Environmental and Resource Economics, 2004

“A Generalized Economic-Hydrologic Model for Efficient Groundwater Production: The Value of Information,” with R.H. Patrick and J. Roach, Proceedings of the 13<sup>th</sup> Annual Conference of the European Association of Environmental and Resource Economics, 2004.

“Optimal Cropping and the Potential Impact of a Water Market on an Agrarian Community: A

Case Study of the San Luis Valley, Colorado,” with M. Ewers and D. Brookshire, Proceedings of the 13<sup>th</sup> Annual Conference of the European Association of Environmental and Resource Economics, 2004.

“Urban Consumer Water Demand: A Field/Experimental Investigation,” with K. Krause, D.S. Brookshire, and H.S. Burness, *Hydrology: Science & Practice for the 21st Century*, Volume II, eds. B. Webb et al, British Hydrological Society, 2004.

“Development of a Model for the Reallocation of Water and Assessment of the Hydrological Effects of Climate Change in the Upper Rio Grande Basin, Southwestern USA,” with M. Campana, L. Scuderi, P. Matthews, D. Brookshire, K. Krause, K. Gregory, S. Snell, in A. Alsharan and W. Wood (eds.), Proceedings, *Dubai International Conference on Water Resources and Integrated Management in the Third Millennium*, London, A.A. Balkema, 2002.

“The Real Price of Oil: A Dynamic CGE Model of US Oil Policy,” with Roy Boyd, *Proceedings of the 22<sup>nd</sup> International Conference of the International Association for Energy Economics*, 1999.

“Comparing Tests of the Theory of Exhaustible Resources,” with R.H. Patrick, *World Congress of Environmental and Resource Economists Book of Abstracts*, Venice, Italy, July 1998.

“A Microeconomic Test of the Theory of Exhaustible Resources,” with R.H. Patrick, *Abstracts for the Eighth Annual Conference of the European Association of Environmental and Resource Economists*, Tilburg University, Tilburg, The Netherlands: June 1997.

“Modeling Uncertainty in Producing Natural Gas from Tight Sands,” with C.A. Dahl and R.H. Patrick in *Proceedings of the 18th International Conference of the International Association for Energy Economics*, 1995.

“Modeling Uncertainty in Production from Tight Gas Sand,” with C.A. Dahl and R.H. Patrick in *Proceedings of the 1995 Mineral Economics Management Society Annual Meeting*, 1995.

“A Well-Based Extraction Cost Function and the Economics of Exhaustible Resources: the Case of Natural Gas,” with R.H. Patrick, *Abstracts for the Fifth Annual Conference of the European Association of Environmental and Resource Economists*, University College Dublin, Ireland, June 1994.

“Downstream Environmental Benefits Through Upstream Efficiency Improvements: The Natural Gas Industry,” with R.H. Patrick in *Proceedings of the 1993 North American Meetings of the International Association for Energy Economics*, 1993.

“Decreasing Marginal Production Costs and the Theory of Exhaustible Resources: The Case of Natural Gas,” with R.H. Patrick in *Proceedings of the 1993 Mineral Economics Management Society Annual Meeting*, 1993.

“The Role of Price Expectations in Natural Gas Drilling Activity: Policy Implications for the U.S. Industry,” with D.L. Moss in *Proceedings of the 1992 North American Meetings of the International Association for Energy Economics*, 1992.

“Policy Implications of Exhaustible Resource Theory for Natural Gas,” with R.H. Patrick in *Proceedings of the 1992 North American Meetings of the International Association for Energy Economics*, 1992.

“An Expository Note on the Calculation of Natural Gas Reserves,” *Proceedings of the Coal Market Strategies Conference*, 1991.

### **WORKING PAPERS (UNDER REVISION, CONSIDERATION, OR IN PROGRESS)**

“Measuring Scarcity in Nonrenewable Resource Production: New Duality Results and Implications for Econometric Tests of the Theory?” with R.H. Patrick.

“A Two-Agent Dynamic Model for an Invasive Weed: Can an Invasive Species Problem be Nipped in the Bud?” with K. Grimsrud, J. Hansen, K. Krause, and J. Thacher.

“Measuring Pollution Control Costs Under Imperfect Information,” with R.H. Patrick.

“Irreversible Discrete Capital Investments in Natural Resource Production,” with R.H. Patrick.

“Testing the Consistency Between Laboratory and *Ex Ante* Market Data,” with K. Krause, D.S. Brookshire, and S. Burness

“When Supply and Demand are Inter-related: The Case of Water Markets Under Prior Appropriations,” with R.H. Patrick.

“Optimal Cropping and the Potential Impact of a Water Market on an Agrarian Community: A Case Study of the San Luis Valley, Colorado,” with M. Ewers and D.S. Brookshire.

“A Generalized Economic-Hydrologic Model for Efficient Groundwater Production: The Value of Information,” with R.H. Patrick and J. Roach.

“Reconciling Tests of the Theory of Exhaustible Resources,” with R.H. Patrick.

“The Impacts of Current Oil Policy: A Dynamic CGE Model,” with R. Boyd.

“Incentive Regulation for Natural Gas Transportation,” with R.H. Patrick

“Incorporating Risk into the Economics of Exhaustible Resources: An Empirical Application,” with R.H. Patrick.

**INVITED PRESENTATIONS:**

“Economics and Water in the Middle Rio Grande,” presented in the UNM, Department of Civil Engineering’s Rio Grande Seminar, Albuquerque, NM: November 28, 2006.

“Strategic Behavior, Incentives, Heterogeneity, and Invasive Species Management: An Update,” presented at the Workshop on the Program of Research on the Economics of Invasive Species Management, Washington, DC: October 19, 2006.

“Dynamic Modeling, Information Transfers, and Uncertainty,” presented at CREATE’s Workshop on Benefit Methodologies for Homeland Security Analysis, Washington, DC: June 9, 2006

“Strategic Behavior, Incentives, Heterogeneity, and Invasive Species Management,” invited presentation to the U.SDA Economic Research Service, Washington, DC: December 1, 2005.

“Water Rates and Affordability,” invited presentation at the State of New Mexico Water Infrastructure Conference, Albuquerque, NM: October 27, 2005.

“Integrating Behavioral and Physical Models: A Case Study of Tight Gas Sand Production,” presented in the UNM Earth and Planetary Science Colloquium Series, Albuquerque, NM: February 3, 2006.

“Urban Water Pricing: A Historical Perspective and the Challenges for the Future,” presented at the 50<sup>th</sup> Annual New Mexico Water Conference, Las Cruces, NM: October 19, 2005.

“Economic and Behavioral Considerations in Water Forbearance Programs,” with P. Ganderton, presented to the Water Acquisition and Management Committee, Albuquerque, NM: October 12, 2005.

“Water and Economic and Community Development,” presented to the 2<sup>nd</sup> UNM Water Forum, Albuquerque, NM: September 9, 2005.

“Urban Consumer Water Demand,” presented to the Water Dialogue Group, Albuquerque, NM: September 23, 2005.

“NM Water Rates and Affordability” with J. Hansen, presented to the State of New Mexico Interim Legislative Committee on Resources and Water, Albuquerque, NM: September 1, 2006.

“Water Prices and Expenditures in New Mexico” presented to the State of New Mexico Water Infrastructure Initiative Team, Santa Fe, NM: August 9, 2005.

“The Effect of Rate Policy on Water Use: Some Observations” presented at the University of New Mexico School of Law Second Annual Water Policy Seminar, Albuquerque, NM: May 20, 2005.

“Water Markets and the Value of Water,” plenary presentation to the Arizona Hydrological Society Annual Technical Symposium, Tucson, AZ: September 17, 2004.

“Water Prices and Scarcity,” presented to the State of New Mexico Interim Legislative Committee on Resources and Water, Albuquerque, NM: August 11, 2004

“Mexico-U.S. Transboundary Water Issues: An Economic View,” presented at an International Education Week Symposium at the University of New Mexico, sponsored by the Latin American and Iberian Institute, Albuquerque, NM: November 19, 2003.

“SAHRA Science: Improving Understanding of Semi-arid Hydrology Supply and Demand.” Invited presentation at the 3<sup>rd</sup> Annual Meeting of SAHRA, an NSF funded Science and Technology Center, Tucson, AZ: October 15, 2003.

“Urban Water, Prices, and Scarcity,” presented to the State of New Mexico Interim Legislative Committee on Natural Resources and Water, Red River, NM: July 17, 2003

“Assessing Tradeoffs in Water Policy Using Integrated Modeling,” with D.S. Brookshire. presented to the Governor’s Blue Ribbon Task Force on Water, Albuquerque, NM: May 15, 2002.

## **CONFERENCE PRESENTATIONS**

The 117<sup>th</sup> Meeting of the American Economic Association (AERE Session): “The Theory of Exhaustible Resources: What Are Econometric Methodologies Testing?” with R.H. Patrick, Philadelphia, PA: January 6-9, 2005.

The 2<sup>nd</sup> International Symposium on Transboundary Water Management: “Issues in the Experimental Determination of Urban Water Demand,” with K. Krause, D.S. Brookshire, S. Stewart, and H.S. Burness, Tucson, AZ: November 17-19, 2004.

British Hydrological Society International Conference, “Water Consumption: Comparing Consumer Response for Water Demand In and Out of the Laboratory,” with K. Krause and D.S. Brookshire, London England: July 12-16, 2004

The European Geophysical Society-American Geophysical Union-European Union of Geosciences Joint Assembly 2003:

- “Water Scarcity, Market-based Incentives, and Consumer Response,” with K. Krause and D. Brookshire
  - “Integrated Modeling, Data Transfers, and Physical Models,” with D. Brookshire
- Nice, France: April 6-11, 2003.

The Second World Congress of Environmental and Resource Economists: “Water Demand: Consumer Response to Scarcity,” with K. Krause and D. Brookshire. Monterey, CA: June 2002.

The 114<sup>th</sup> Meeting of the American Economic Association (AERE Session): “Water Consumption: Comparing Consumer Response in and Out of the Lab,” with K. Krause and D. Brookshire. Atlanta, GA: January 2002

The 10<sup>th</sup> Annual Conference of the European Association of Environmental and Resource Economists: University of Crete, Rhythmo, Greece: June 2000

- “Benefit Transfers: A Case study of the Middle Rio Grande,” with D. Brookshire and R. DiSimone
- “A Microeconomic Test of the Theory of Exhaustible Resources,” with R.H. Patrick.

The 112<sup>th</sup> Annual Meeting of the American Economic Association (AERE Session): “Reconciling Empirical Tests of the Theory of Exhaustible Resources,” with R.H. Patrick, Boston, MA: January 2000.

CU Environmental and Resource Economic Workshop “Product Pricing and the Impact of Heterogeneous Demand for Environmental Goods,” with K. Krause, Boulder, CO, July 1999.

The 12<sup>th</sup> Annual Western Conference of the Advanced Workshop in Regulation and Competition: “Product Pricing and the Impact of Heterogeneous Demand for Environmental Goods,” with K. Krause, San Diego, CA: July 1999.

World Congress of Environmental and Resource Economists: “Comparing Empirical Tests of the Theory of Exhaustible Resources,” with R.H. Patrick, Venice, Italy: June 1998.

Workshop on Creating Career Opportunities for Female Economists sponsored by the National Science Foundation and the American Economic Association Committee for the Status of Women in the Economics Profession: Participant, Chicago, IL: January 1998.

The 18<sup>th</sup> Annual North American Conference of the International Association for Energy Economics: San Francisco, CA: September 1997.

- “Order 636 and the Natural Gas Industry,” and
- “A Microeconomic Test of the Theory of Exhaustible Resources,” with R.H. Patrick,

The 10<sup>th</sup> Annual Western Conference of the Advanced Workshop in Regulation and Public Utility Economics: “Order 636 and the Natural Gas Industry,” San Diego, CA: July 1997.

The 8<sup>th</sup> Annual Conference of the European Association of Environmental and Resource Economists: “A Microeconomic Test of the Theory of Exhaustible Resources,” with R.H. Patrick, Tilburg University, Tilburg, The Netherlands: June 1997.

The 108<sup>th</sup> Annual Meeting of the American Economic Association (AEA Session): “A Microeconomic Test of the Theory of Exhaustible Resources,” with R.H. Patrick, San Francisco, CA: January 1996.

The 8<sup>th</sup> Annual Western Conference of the Advanced Workshop in Regulation and Public Utility Economics: “The Economic Possibilities of Natural Gas Conservation: Antithetical Results of Prorating Regulation,” San Diego, CA: July 1995

The 5<sup>th</sup> Annual Meetings of the Mineral Economic Management Society: “Modeling Uncertainty in Production from Tight Gas Sands,” with C.A. Dahl and R.H. Patrick, Boulder, CO: March 1995.

The 16<sup>th</sup> Annual North American Meetings of the International Association for Energy Economics: “Modeling Uncertainty in Producing Natural Gas from Tight Sands,” with C.A. Dahl, and R.H. Patrick, Dallas, TX: October 1995.

The 7<sup>th</sup> Annual Western Conference of the Advanced Workshop in Regulation and Public Utility Economics: “Incentives in Pipeline Pricing and Capacity,” San Diego, CA: July 1994.

The 5<sup>th</sup> Annual Conference of the European Association of Environmental and Resource Economists: “A Well-Based Cost Function and the Economics of Exhaustible Resources: The Case of Natural Gas,” with R.H. Patrick, University College, Dublin, Ireland: June 1994.

The 15<sup>th</sup> Annual North American Meetings of the International Association for Energy Economics: “Downstream Environmental Benefits Through Upstream Efficiency Improvements: The Natural Gas Industry,” with R.H. Patrick, Seattle, WA: October 1993.

The 105<sup>th</sup> Meeting of the American Economic Association (AERE Session): “Policy Implications of Exhaustible Resource Theory for Natural Gas Production, Contracting, and Regulation,” with R.H. Patrick, Anaheim, CA: January 1993.

The 14<sup>th</sup> Annual North American Meetings of the International Association for Energy Economics: “Policy Implications of Exhaustible Resource Theory for Natural Gas,” with R.H. Patrick, New Orleans, LA: October 1992.

The Coal Market Strategies Conference: “An Expository Note on the Calculation of Natural Gas Reserves,” Denver, CO: October 1991.

## **GRANTS**

### ***Received:***

United States Department of Agriculture, “Strategic Behavior, Incentives, Heterogeneity, and Invasive Species Management” (PI) with K. Grimsrud, J. Thacher, and K. Krause (\$240,000) 2005/2008.

Water Resources Research Institute,” Water (Co-PI) with J. Thacher and G Aldrich (\$10,000) 2005/2006.

UNM Provost and Dean of Arts and Sciences, “Equity in Faculty Compensation and Advancement at UNM” (Co-PI) with M. Binder, K. Krause, and J. Thacher (\$27,000)

Los Alamos National Laboratories, “The ZeroNet Project,” (\$69,400), 2004/2005.

Sandia National Laboratory, “Fully Integrated System Dynamics Toolbox for Water Resources Planning,” (PI) with D. Brookshire, J. Thacher, K. Grimsrud (\$300,000) 2004/2006.

Sandia National Laboratory, “Consumer Confidence in Markets,” (PI) with R. Santos (\$7,500) 2004.

National Science Foundation, “Efficient Management of the Water Resources in a Semi-Arid Region,” a Science Technology Center housed at the University of Arizona. with D. Brookshire (PI) , and K. Krause. Project Director: Jim Shuttleworth, University of Arizona, (\$125,000 per year UNM budget) 2000/2006.

National Science Foundation, “A Quantitative Assessment of the Economic and Institutional Impacts of Climate Change on the Upper Rio Grande Valley Using an Integrated GIS Framework,” with L. Scuderi, O.P. Mathews, D.S. Brookshire, and M. Campana, (\$675,000) 2000/2002.

Environmental Protection Agency STAR Grant, “An Intergenerational GIS Framework for Water Reallocation and Decision Making In the Upper Rio Grande Basin,” with O.P. Mathews, D. Brookshire, M. Campana, L. Scuderi, K. Gregory, S. Snell, and K. Krause, (\$451,000) 2000/2002

National Science Foundation Research Opportunities for Undergraduate Education, “Industrial and Commercial Water Demand” (in conjunction with the Science and Technology Center at the University of Arizona), (\$14,500) 2001/2003.

Water Resources Research Institute, “The Impact of Heterogeneous Consumer Response on Water Conservation Goals,” with K. Krause, (\$14,998) 1999/2000.

United States Geologic Survey, “The Potential Consequences of Climate Variability and Change: An Assessment for the Southwest,” (\$12,500) 1998/99.

National Science Foundation and Western Alliance to Expand Student Opportunities, “Intergenerational Responsibility for Environmental Resources,” with K. Krause, (\$1650) 1998.

## **AWARDS, HONORS, AND APPOINTMENTS**

Ground Water Protection Advisory Board for the City of Albuquerque, appointed October 2006.

Invited Member of the New Mexico Technical Team on Climate Change and the Impact on Water. 2005/2006.

Curriculum Board Member Water Resources Program. University of New Mexico. Elected 2001-current.

Invited Member of the Southwest Climate Change Assessment Team. Sponsored by the U.S. Global Change Research Program in conjunction with the White House Office of Science and Technology Policy, 1998/99.

Invited Member of the Second World Congress of Environmental and Resource Economists Site Selection Committee, 1999.

Association of Environmental and Resource Economists Travel Grant to attend the World Congress of Environmental and Resource Economists, Venice, Italy: June, 1998.

Invited Participant to the Workshop on Creating Career Opportunities for Female Economists, sponsored by the National Science Foundation and the American Economic Association's Committee for the Status in the Economics Profession, Chicago, IL: January 1998.

Outstanding Research Achievement Award, Naval Postgraduate School 1994.

## **DISSERTATION AND THESES COMMITTEES**

### ***Doctoral:***

Gwen Aldrich: Ph.D. Dissertation in progress (Advisor)

Joe Saloio: Ph.D. Dissertation in progress (Advisor).

Jason Hansen: Ph.D. Dissertation in progress (Advisor).

Mary Ewers: Ph.D. Dissertation completed November 2004 (Co-Advisor)

James Cash: Ph.D. Dissertation completed October 2000 (Advisor).

Christoph Brunder: Ph.D. Dissertation in progress.

Jesse Roach (University of Arizona Hydrology Student) Ph.D. Dissertation in progress.

Hale Thurston: Ph.D. Dissertation completed May 1999.

Christian Schmidt: Ph.D. Dissertation completed May 1996.

***Masters:***

Emma Nolan, Professional Project, Water Resources Program, in progress. (Advisor)  
 Andrew Funk, Professional Project, Water Resources Program, in progress. (Co-Advisor)  
 Martha Ennis, Professional Project, Water Resources Program, in progress. (Advisor)

Julie Anderson, Professional Project, Water Resources Program, June, 2005.  
 Anne Demint: Professional Project, Water Resources Program, July 2005.  
 Barbara Heemink: Professional Project, Water Resources Program, May, 2005.  
 Steve Kolk: Professional Project, Water Resources Program, May 2003.

Lynne Paretchan: Professional Project, Water Resources Program, February 2003.  
 Hirotako Sato: Masters Professional Project, Water Resources Program, July 1999.  
 Julia Bingham: Masters Professional Project, School of Architecture and Planning, 1997.  
 Julia Sabin: Masters Professional Project, School of Architecture and Planning, 1996.

**COURSES TAUGHT*****Graduate:***

Survey of Natural Resource and Environmental Economics (Fall: 1999)  
 Natural Resource Economics (Fall: 1996, 2002, 2005 Spring 2004)  
 Natural Resource Modeling (Fall: 2006)  
 Economic Theory (Fall: 2003, 2004)  
 Microeconomic Theory I (Spring: 1996, 1997, 1998, 2002, 2003, 2006)  
 Mathematical Economics (Fall: 1997, 1998)  
 Seminar in Industrial Organization (Fall: 2006)  
 Interdisciplinary Water Resources I: Basin Survey (Fall: 2000)  
 Interdisciplinary Water Resources II: Modeling (Spring: 2001, 2002, 2003, 2004, 2005, 2006, 2007)  
 Managerial Economics (Summer: 1994)  
 Resources Management Short Course. Domestic and International including: Romania (1995), Hungary (1993, 1995), Slovakia (1994), Czech Republic (1994), Norway (1993), and Sri Lanka (1993)

***Undergraduate:***

Industrial Organization (Fall: 2000, 2002, 2005)  
 History of Economic Theory and Models (Spring 2000)  
 Mathematical Methods in Economics (Spring: 1999, 2001, 2005, Fall: 2003)  
 Principles of Microeconomics (Fall: 1990, 1995, 1996, 1997, 1998, 1999, Spring: 1991, 1995, 1996, 1997, 1998, 1999, 2002, 2005)  
 Natural Resource Economics (Fall: 1995. Spring: 2000)  
 Society and the Environment (Fall 2002)

## REVIEWS FOR JOURNALS

Contemporary Economic Policy, Economic Inquiry, Environmental and Development Economics, Environmental and Resource Economics, European Journal of Political Economy, Journal of Economic Literature, Journal of Regulatory Economics, Journal of Econometrics, Journal of Environmental Economics and Management, Northwest Journal of Business and Economics, Resources and Energy Economics, Resources Policy, The Energy Journal, International Transactions in Operational Research, Choices, Land Economics

## UNIVERSITY SERVICE

### *College or University:*

2006-2007

Conflict of Interest Sub-C Committee  
Water Planning Advisory Group

2005-2006

Search Committee Co-Chair for the Director of the Water Resources Program  
Water Planning Advisory Group

2004-2005

Search Committee for Director, the Office for Policy, Security and Technology

2003-2004

Sabbatical Committee

2002-2003

Sabbatical Committee

### *Departmental:*

2006-2007

Graduate Studies, Graduate Director, Microeconomic Core Examination Committee,  
Seminar Committee, Applied Masters Feasibility Committee

2005-2006

Graduate Studies, Graduate Director, Microeconomic Core Examination Committee

2004-2005

Graduate Studies, Graduate Director, Microeconomic Core Examination Committee

2003-2004

Graduate Studies, Graduate Director (Fall 2003-), Faculty Hiring, Chair (Spring 2003), Salary Committee, Natural Resource and Environmental Field Examination, Microeconomic Core Examination, Macroeconomic Core Examination Committee

2002-2003

Graduate Studies, Faculty Hiring (Chair), Salary, Natural Resource and Environmental Field Examination, Microeconomic Core Examination

2001-2002

Graduate Studies, Salary, Natural Resource and Environmental Field, Examination, Microeconomic Core Examination

2000-2001

Graduate Studies, Personnel, Natural Resource and Environmental Field Examination, Experimental Lab,

1999-2000

Undergraduate Studies (Interim Undergraduate Advisor: Spring 2000), Natural Resource and Environmental Field Examination, Departmental Evaluation, Experimental Lab

1998-1999

Microeconomic Core Examinations, Natural Resource and Environmental Field Examinations (Chair), Departmental Evaluation, Experimental Lab

1997-1998

Microeconomic Core Examination, Natural Resource and Environmental Field Examination, Graduate Studies, Departmental Evaluation, Peer Teaching Review

1996-1997

Microeconomic Core Examination, Natural Resource and Environmental Field Examination (Chair), Faculty Recruitment, Information, Experimental Lab, Student Evaluation Review

1995-1996

Microeconomic Core Examination, Natural Resource and Environmental Field Examination, Faculty Recruitment,

**OTHER WORK EXPERIENCE**

Economic and Geologic Analyst for: AMERICAN WELDING SOCIETY Denver, Colorado; HOMESTAKE MINING COMPANY, Denver, Colorado; MINPROC, Denver, Colorado	Aug. 1986-April 1990
Exploration and Production Geologist, NATURAL GAS CORPORATION OF CALIFORNIA, Denver, Colorado	Oct. 1981-July 1986
Exploration Geologist, FMC CORPORATION, Denver, Colorado	May 1981-September 1981
Geologist, HOMESTAKE MINING COMPANY, Gunnison, Colorado	May 1979-April 1981
Drafter, HOMESTAKE MINING COMPANY, Gunnison, Colorado	Aug. 1977-April 1979