

BONNIE G. COLBY, Ph.D.
Professor of Agricultural & Resource Economics
The University of Arizona
PO Box 40460, Tucson Arizona 85717-0460
bcolby@email.arizona.edu

EDUCATION AND EMPLOYMENT

B.S. Agricultural Economics, University of California-Davis, 1978
Ph.D. Agricultural Economics, University of Wisconsin-Madison, 1983
1983 - present Professor, Department of Agricultural Economics, University of Arizona.

HONORS, AWARDS AND DISTINGUISHED OUTREACH (selected examples)

Women of Impact Award, University of Arizona, 2023

Founding Member, *Colorado River Research Group, An Independent, Scientific Voice for the Future of the Colorado River*, 2018 – present.

Thesis advisor, 2016 *Outstanding Thesis Award*, Western Agricultural Economics Assoc. (A. Clarke)

Warren Hall Medal, Universities Council on Water Resources, 2015. Awarded for “distinguished water research, public service and enduring contribution to knowledge and the public good”

Lead Economics Faculty, Kinship Conservation Executive Training Program, 2008-13

Faculty, Kennedy School of Government, Executive Program in Environmental Economics, Harvard University, 2000-02

Distinguished Scholar Award, Western Agricultural Economics Association, 2007

Invited testimony before U.S. Senate, tribal councils 13 indigenous nations, Western Governors Association, legislatures 8 U.S. states,

U.S. President’s Council on Sustainable Development, 1994-96

Outstanding Research Scientist Award, University of Arizona College of Agriculture, 1990

Best Published Research Award, Western Agricultural Economics Association, 1988

SCHOLARLY PUBLICATIONS (* designates Colby graduate student as co-author)

Refereed Journal Articles (partial list, selected examples)

B. Colby, Teaching Water Resource Economics for Policy Analysis, *Applied Economics Teaching Resources*, 2023.

McGreal*, B. and B. Colby Effects of Economic and Climatic Factors on Arid Agricultural Water Use, *Journal of Soil and Water Conservation*, 2023.

Colby, Bonnie G and H Hansen*, Colorado Basin Incentive-Based Urban Water Policies: Review and Evaluation, *Journal of the American Water Resources Association*, Vol 55: 1098-1115, 2022

Colby, B., Acquiring Environmental Flows: Ecological Economics of Policy Development in Western U.S. *Ecological Economics*, 2020.

- *Isaaks, R., & Colby, B. Empirical Application of Rubinstein Bargaining Model In Western U.S. Water Transactions. *Water Economics and Policy* 6, 2020.
- *Young, R., B. Colby and G. Thompson "Tribal Water Rights, Community Economies, and Adaptive Water Institutions in the Western United States" *Journal of Natural Resources Policy Research* 9, 2019.
- Colby, B. and R. *Isaaks, Water Trading: Adaptation, Innovations and Modeling, *Journal of Contemporary Water Research and Education*, 2019.
- Kendy, E., B. Aylward, L. Ziemer, B. Richter, B Colby, et al. "Water Transactions for Streamflow Restoration, Water Supply Reliability, and Rural Economic Vitality in the Western United States" *Journal of the American Water Resources Association*, 2018.
- *Deol, S. and B.G. Colby, Economies of Tribal Nations: Water Rights, Agriculture and Gaming, *Journal of Contemporary Water Research and Education*, 2018.
- *Clarke, A., B. Colby and G. Thompson, Seasonal Elasticities of Household Water Demand: Application of the Stone-Geary Model Under an Increasing Block Rate Structure, *Land Economics* 93, 2017.
- *Duval, D. and Bonnie Colby, "Colorado River Flows and the Fisheries Economy of the Upper Gulf of California", *Ecological Engineering*, 2016.
- *Kerna, A., Bonnie Colby, and F. Zamora, Valuing Environmental Flows in Mexico's Colorado River Delta, *Water Economics and Policy*, 2016.
- *Schuster E. and Bonnie Colby, "Farm And Ecological Resilience To Water Supply Variability," *Journal of Contemporary Water Research and Education*, 2013.
- Bhagyam *Chandrasekharan and Bonnie Colby, "Electricity Load Forecasting Improvements as a Climate Change Adaptation", *Journal of Natural Resources Policy Research*, 2013.
- *Bark, R., D. Osgood, Bonnie G. Colby, and E. Halper, "How Do Homebuyers Value Different Types of Green Space?" *Journal of Agricultural and Resource Economics* 36, 2011.
- *Jones, Lana and Bonnie Colby. "Weather, Climate, and Environmental Water Transactions". *Weather, Climate, and Society* 2, 2010.
- *Basta, E and B Colby, "Water Market Trends: Transactions, Quantities, and Prices," *The Appraisal Journal* 78, 2010.
- *Bark R.H., Colby B.G. and Dominguez F. Snow Days? Snowmaking adaptation and the future of low latitude, high elevation skiing in Arizona, USA. *Climatic Change*, 2009.
- *Bark-Hodgins, D Osgood and B. Colby, "Habitat Preservation and Restoration: Preferences for Habitat Quality", *Ecological Economics*, 2008.
- Colby, Bonnie and J *Pullen, "Influence of Climate Variability on the Market Price of Water in the Gila-San Francisco Basin." *Journal of Agricultural and Resource Economics*, 2008.
- Colby, B.G. Assessing the Value of Adjudications in a World of Uncertainty: An Economic Perspective, *University of Denver Law Review*, 2007.
- *Bark-Hodgins, R. and Bonnie Colby, An Economic Assessment of the Sonoran Desert Conservation Plan, *Natural Resources Journal*, 46, 2006.

- Colby, B.G. and P. *Orr, "Economic Tradeoffs in Preserving Riparian Habitat", *Natural Resources Journal*, 2005.
- Colby, B.G. and E. *Smith-Incer, "Visitors Values of Local Economic Impacts of Riparian Habitat Preservation", *Journal of American Water Resources Assoc.* 41, 2005.
- McCann, L. and Colby, B.G "Transaction Cost Measurement Related to Environmental and Natural Resource Policies", *Ecological Economics*, 2005.
- Ganderton, P., D. Brookshire, B. Colby and M. Ewers, "Market Prices for Water in the Semi-Arid West", *Water Resources Research*, 2004.
- *Orr, P. and Colby, B.G. "Institutions and Incentives to Protect Water-Dependent Amenities," *Water Resources Research*, 2004.
- Colby, B. G. and Steve *Wishart, "Quantifying the Influence of Desert Riparian Areas on Residential Property Values", *The Appraisal Journal*, 2002.
- Colby, B. G., "Cap-and-Trade Policy Challenges: A Tale of Three Markets," *Land Economics* 72, 2000.
- Colby, B. G., "Evaluating Market Transactions, Litigation and Regulation as Tools for Implementing Environmental Restoration," *Arizona Law Review* 42, 2000.
- Colby, B. G., and T. P. d'Estrée. "Economic Evaluation of Mechanisms to Resolve Water Conflicts," *International Journal of Water Resource Development*, 2000.
- *Kirchoff, S., B. G. Colby, and J. LaFrance Evaluating the Performance of Benefit Transfer: An Empirical Inquiry, *Journal Of Environmental Economics And Management* 33, 1997.
- Leones, J., Bonnie Colby, D. Corey and L. *Ryan Measuring Regional Economic Impacts Of Streamflow Depletion *Water Resources Research* 33, 1997.
- Colby, B., Bargaining over Agricultural Property Rights, *American Journal of Agricultural Economics* 77, 1995.
- Colby, B, K. *Crandall And D. *Bush Water Right Transactions Market Values And Price Dispersion, *Water Resources Research* 29, 1993
- Colby, B., Estimating, The Value Of Water And Alternative Uses *Natural Resources Journal* 1989.
- Colby, B. And D. Cory, Valuing Amenity Resources under Uncertainty: Does the Existence of Fair Contingent Claims Markets Matter? *Journal Of Environmental Economics And Management* 16, 1989.
- Colby, B. and C. *Durham, M. Longstreth, Impact Of State Tax Credits In Energy Prices On Adoption Of Solar Energy Systems, *Land Economics* 64, 1988.
- D. Corey, Bonnie Colby, E. Carpenter, Uncertain Recreation Quality And Wildlife Valuation Or Conventional Benefit Measures Adequate *Western Journal Of Agricultural Economics* 13, 1988
- Colby, B. Do Water Markets Work? Market Transfers And Trade-Offs, *Water Resources Research* 23, 1987.
- Colby, B., D. *Bush, W. Martin, T. Brown Do Water Market Prices Appropriately Measure Water Values? *Natural Resources Journal* 27, 1987.
- Cory, D. and Bonnie Colby, Requiem for Option Value, *Land Economics* 63, 1987.
- B. Colby, Soil Productivity and Farmers' Erosion Control Incentives-A Dynamic Modeling Approach

Western Journal of Agricultural Economics, 1986.

Colby, B. and D. Bromley Soil Management Decisions: How Should They Be Compared and What Variables Influence Them? *North Central Journal of Agricultural Economics*, Vol. 8, 1986.

Colby, B., Irrigated Agriculture and Groundwater Quality: A Framework for Policy Development, *American Journal of Agricultural Economics*, Vol. 67, 1985.

Books

Colby, Bonnie, and George Frisvold. *Risk and Resilience: The Economics of Climate-Water-Energy, Challenges in the Arid Southwest*. Resources for the Future Press, 2011.

Colby, B.G. and Kathy Jacobs, *Water Policy for Urbanizing Arid Regions*, Resources for the Future Press, 2006.

Thorson, J., S. *Britton and B. Colby, *Tribal Water Conflicts: Essays in Law, Economics and Policy*, University of Arizona Press, 2006.

Colby, B.G., John Thorson and S. *Britton. *Negotiations Over Tribal Water Rights*. University of Arizona Press, 2005.

Colby, B. G., and T. P. d'Estrée, *Braving the Currents: Resolving Conflicts Over the Rivers of the American West*, Kluwer Academic Publishers, 2004.

Colby, B. et al, as member of National Academy of Science Committee on Western Water Management & Policy, *Water Transfers in the West: Efficiency, Equity, and the Environment*, National Academies Press, 1992.

Colby, B. and *Bush, D. *Water Markets in Theory and Practice*, Westview Press, 1987.