University of Arizona School of Government and Public Policy 315 Social Science Bldg Tucson, AZ 85721

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### **Appointments**

Associate Professor. School of Government and Public Policy. University of Arizona. 2020 - Present.

Director, Master of Public Administration and Master of Public Policy Programs. 2021 - Present.

Associate Professor. Arid Lands Graduate Interdisciplinary Program. 2020 - Present.

Associate Professor. Global Change Graduate Interdisciplinary Program. 2020 - Present.

Associate Professor (Courtesy Appointment). Agricultural and Resource Economics. 2021 - Present.

Associate Professor (Courtesy Appointment). Economics. 2021 - Present.

Assistant Professor. School of Government and Public Policy. University of Arizona. 2014 - 2020.

Visiting Scholar. Department of Agricultural & Resource Economics. University of California Berkeley. Fall 2017.

#### Education

Ph.D. Environmental and Natural Resource Economics. Yale University. 2014.

M.Phil. Environmental and Natural Resource Economics. Yale University. 2012.

M.Sc. Environment and Development, with Merit. London School of Economics. 2007.

B.A. Economics, Magna Cum Laude. Whitman College. 2005.

# Publications (Peer Reviewed)

Bakkensen, L., and Barrage, L. *Conditionally Accepted*. Climate Shocks, Cyclones, and Economic Growth: Bridging the Micro-Macro Gap. *The Economic Journal*.

Wen, X., Alarcon Ferreira, A. M., Rae, L., Saffari, H., Adeel, Z., Bakkensen, L., Mendez Estrada, K., Garfin, G., McPherson, R., Vargas, E. 2022. A Comprehensive Methodology for Evaluating Economic Impacts of Floods: An Application to Canada, Mexico, and the United States. *Sustainability*. 14(21): 14139.

Bakkensen, L., and Barrage, L. 2022. Going Under Water? Flood Risk Belief Heterogeneity and Coastal Home Price Dynamics. *The Review of Financial Studies*. 35(8): 3666-3709. Media coverage: NBER Digest, Pacific Standard.

Fan, Q., and Bakkensen, L. 2022. Household Sorting as Adaptation to Hurricane Risk in the United States. *Land Economics*. 98(2): 219-238.

Schlager, E., Bakkensen, L., Olivier, T, and Hanlon, J. 2021. Institutional Design for a Complex Commons: Variations in the Design of Credible Commitments and the Provision of Public Goods. *Public Administration*. 99(2): 263-289.

Adeel, Z., Alarcon, A. M., Bakkensen, L., Franco, E., Garfin, G., McPherson, R., Mendez, K., Roudaut, M. B., Saffari, H., and Wen, X. 2020. Developing a Comprehensive Methodology for Evaluating Economic Impacts of Floods in Canada, Mexico, and the United States. *International Journal of Disaster Risk Reduction*. 50:101861.

Bakkensen, L., and Ma, L. 2020. Sorting Over Flood Risk and Implications for Policy Reform. *Journal of Environmental Economics and Management*. 104:102362. Media coverage: Architecture Magazine, UANews. 2020 JEEM Best Paper Award Winner.

Bakkensen, L., and Schuler, P. 2020. A Preference for Power: Willingness to Pay for Energy Reliability Versus Fuel Type in Vietnam. *Energy Policy*. 144: 111696.

Bakkensen, L., Ding, X., and Ma, L. 2019. Flood Risk and Salience: New Evidence from the Sunshine State. *Southern Economic Journal*. 85(4): 1132-1158.

Bakkensen, L., Park, D., and Sarkar, R. 2018. Climate costs of tropical cyclone losses also depend on rain. *Environmental Research Letters*. 13(7): 074034.

Bakkensen, L., Shi, X, and Zurita, B. 2018. The Impact of Disaster Data on Estimating Damage Determinants and Climate Costs *Economics of Disasters and Climate Change*. 2(1): 49-71.

Bakkensen, L. 2017. Mediterranean Hurricanes and Associated Damage Estimates. *Journal of Extreme Events*. 4(2): 1750008.

Bakkensen, L., Fox-Lent, C., Read, L., and Linkov, I. 2017. Validating Resilience and Vulnerability Indices in the Context of Natural Disasters. *Risk Analysis*. 37(5): 982-1004.

Seo, N. and Bakkensen, L. 2017. Is Tropical Cyclone Surge, Not Intensity, What Kills So Many People in South Asia? *Weather, Climate, and Society*. 9(2): 171-181.

Bakkensen, L. and Mendelsohn, R. 2016. Risk and Adaptation: Evidence from Global Hurricane Damages and Fatalities. *Journal of the Association of Environmental and Resource Economists*. 3(3): 555-587.

Seo, N. and Bakkensen, L. 2016. Did Adaptation Strategies Work? High Fatalities from Tropical Cyclones in the North Indian Ocean and Future Vulnerability Under Global Warming. *Natural Hazards*. 82(2): 1341-1355.

Bakkensen, L., and Larson, W. 2014. Population Matters When Modeling Hurricane Fatalities *Proceedings of the National Academy of Sciences*. 111(50): E5331-E5332. Media coverage: Washington Post.

Mendelsohn, R., Emanuel, K., Chonabayashi, S, and Bakkensen, L. 2012. The Impact of Climate Change on Global Tropical Cyclone Damage. *Nature Climate Change*. 2(2): 1-5.

Bakkensen, L. 2007. Student-Perspective Sources of Environmental Learning in South Korea. *Journal of the Korean Geographical Society*. 42(5): 769-787.

Hazlett, D. and Bakkensen, L. 2005. Global Trade in CO2 Permits: A Classroom Experiment. *Perspectives in Economic Education Research*. 1(1): 18-43.

# Book Chapters (Peer Reviewed)

Bakkensen, L., and Conte, M. 2022. Risk Preferences and Natural Disasters: A Review of Theoretical and Empirical Themes. Handbook on the Economics of Disasters. Edward Elgar Publishing. Cheltenham, United Kingdom.

Bakkensen, L., and Blair, L. 2022. The Economics of Tropical Cyclone Adaptation. Handbook of Behavioral Economics and Climate Change. Edward Elgar Publishing. Cheltenham, United Kingdom.

Bakkensen, L. and Blair, L. 2020. Flood Damage Assessments: Theory and Evidence from the United States. Encyclopedia of Crisis Analysis. Oxford University Press. Oxford, United Kingdom.

Bakkensen, L. and Mendelsohn, R. 2019. Global Tropical Cyclone Damages and Fatalities Under Climate Change: An Updated Assessment. Hurricane Risk, Volume 1. Springer. Cham, Switzerland.

# White Papers

Bakkensen, L. and Johnson, R. 2017. The Economic Impacts of Extreme Weather: Tucson and Southern Arizona's Current Risks and Future Opportunities. *Making Action Possible in Southern Arizona Dashboard*. Available online here. Media coverage: AZCentral, AZDWR, AZPM, Daily Wildcat (headline story), KVOA, KVOI, UANews, UNISDR.

### Selected Work in Progress

Adeel, Z., Bakkensen, L., Cabrera-Rivera, O., Franco, E., Garfin, G., McPherson, R., Mendez, K., and Wen, X. Challenges in and Opportunities for International Collaboration: Costing Flood Damages and Losses across Canada, Mexico, and the United States. (*Under review*.)

Bakkensen, L., Phan, T., and Wong, T.N. Leveraging the Disagreement on Climate Change: Theory and Evidence. (*Under review*.)

Bernat, R., Megdal, S., Eden, S., and Bakkensen, L. Stakeholder Opinions on the Issues of the Central Arizona Groundwater Replenishment District and Policy Alternatives. (*Under review*.)

Bakkensen, L. Learning from Public Information Under Conflicting Signals: Evidence from U.S. Tornadoes.

Bakkensen, L., and Ahmed, S. The Role of Risk Preferences in Climate Decisions: Evidence from Bangladeshi Farmers.

Bakkensen, L., and Barrage, L. Climate Change, Cyclone Risks, and Economic Growth: A Business Cycles Approach.

Bakkensen, L., and Blair, L. Building Codes and Spillovers: Evidence from Hurricane Michael.

Shrader, J., Bakkensen, L., and Lemoine, D. Fatal Errors: The Mortality Value of Accurate Weather Forecasts.

## Grants and Fellowships

Arizona Institute for Resilience Resilience Grant. \$33,651. 2022.

Social & Behavioral Sciences Research Institute Faculty Small Grant. \$5,000. 2022.

Udall Center for Public Policy Fellowship. \$10,000. 2019.

The National Academies of Sciences, Engineering, and Medicine Gulf Research Program Early-Career Research Fellowship. \$76,000. 2017-2019.

Social & Behavioral Sciences Research Institute Faculty Small Grant. \$3,500. 2017.

Making Action Possible Dashboard White Paper Grant. \$7,500. 2016.

Yale Institute for Biosphere Studies Graduate Research Grant. \$5,000. 2010.

Fulbright Teaching Grant to South Korea. 2005.

Perry Summer Collaborative Research Grant. 2004.

#### Conference and Seminar Presentations

2023 (Including scheduled): Workshop on Natural Resource Economics Theory. University of California, Santa Barbara. Santa Barbara, CA; Department of Economics (Virtual) External Seminar Series. University of Birmingham, UK; Climate Justice, Climate Action Seminar Series. Whitman College. Walla Walla, WA.

2022: California Polytechnic State University, San Luis Obispo, Department of Economics Seminar. San Luis Obispo, CA; School of Geography and Development Colloquium. University of Arizona. Tucson, AZ; Disaster Recovery Workshop. Humanitarian Assistance Technical Support. University of Arizona. Tucson, AZ; Climate Risks: Theory and Practice. Federal Reserve Bank of San Francisco. San Francisco, CA (*Invited panelist*); Federal Housing Finance Agency, Virtual Seminar.

2021: Reed College, Department of Economics, Virtual Seminar; Commission for Environmental Cooperation's Virtual Workshop: Third Expert Workshop on Flood-Costing Methods (*Workshop co-organizer and presenter*); Indiana University, Natural Resource Governance Symposium for Young Scholars; Indian Institute of Technology Tirupati, Department of Economics, Virtual Seminar; University of Connecticut, Environmental/Law & Economics/IO Virtual Seminar; Federal Reserve Bank of New York, Climate Economics Virtual Seminar. Network of Schools of Public Policy, Affairs, and Administration Annual Conference: Academic Women in Public Administration's Panel on "Women MPA Directors: Narratives in Leadership." (*Invited panelist*).

2020: University of Minnesota, Department of Applied Economics. St. Paul, MN; Commission for Environmental Cooperation's Virtual Workshop: Indigenous Perspectives on Flood Damages and Losses. (Workshop co-organizer and Session Chair); Federal Reserve Bank of San Francisco's Virtual Seminar on Climate Economics; University of Washington, Evans School of Public Policy and Governance, Virtual Seminar; Commission for Environmental Cooperation's Virtual Workshop: Second Expert Workshop on Flood-Costing Methods. (Workshop co-organizer and Session Chair); University of Wisconsin-Madison, Department of Agricultural & Applied Economics, Virtual Applied Economics Seminar; Federal Reserve Board Virtual Applied Microeconomics Seminar; World Bank/International Monetary Fund Virtual Seminar on Macroeconomics and Climate; Federal Reserve Bank of Richmond's Virtual Climate Economics Workshop (Invited discussant); American Geophysical Union Virtual Fall Meeting (Invited presenter).

2019: AERE and AEA Sponsored Sessions at the Allied Social Sciences Association Annual Meeting (*Presenter, Discussant x2*). Atlanta, GA; ASU-SNU BK Winter International Conference. Phoenix, AZ; Columbia University Sustainable Development Seminar. New York, NY; Fordham University. Bronx, NY; Association of Environmental and Resource Economists 2019 Summer Conference (*Presenter, Session Chair*). Lake Tahoe, NV; National Bureau of Economic Research Summer Institute, Environmental & Energy Economics. Cambridge, MA (*Egg timer presenter*); Commission for Environmental Cooperation's Workshop on Methods for Assessing the Costs of Floods (*Presenter, Panel Chair*). Vancouver, Canada; Eastern Carolina University's Symposium on Economic Analysis and Environmental Uncertainties (*Invited presenter*). Greenville, NC; University of Washington, School of Marine and Environmental Affairs. Seattle, WA.

2018: AERE Sponsored Session at the Allied Social Sciences Association Annual Meeting (*Discussant*). Philadelphia, PA; School of Geography and Development Colloquium. University of Arizona. Tucson, AZ; Public Health Poster Forum: A Public Health Discussion on Disaster Preparedness, Response, and Long-term Recovery (*Keynote panelist*). University of Arizona, Mel and Enid Zuckerman College of Public Health. Tucson, AZ; 6th World Congress of Environmental and Resource Economists. Gothenburg, Sweden; National Bureau of Economic Research Summer Institute, Environmental & Energy Economics. Cambridge, MA (*Attendee*); Arizona State University Environment, Resource, and Energy Economics Seminar. Tempe, AZ; Resources For The Future, Washington, DC; Association For Public Policy Analysis & Management Fall Research Conference. Washington, DC; Closing the Gap on Natural Disaster Risk Reduction: Linking Research and Practice Conference (*Invited panelist*). Wharton Risk Management and Decision Processes Center. Philadelphia, PA.

2017: AERE Sponsored Session at the Allied Social Sciences Association Annual Meeting. Chicago, IL; 6th Annual Association of Environmental and Resource Economists Summer Conference. Pittsburgh, PA; 6th International Summit on Hurricanes and Climate Change. Crete, Greece; Association for Environmental Studies and Sciences Conference. Tucson, AZ; National Bureau of Economic Research Summer Institute, Environmental & Energy Economics. Cambridge, MA; Department of Energy National Laboratory Berkeley Lab Climate & Ecosystem Sciences Division, Climate Brownbag Seminar. Berkeley, CA; University of California Berkeley, Environmental and Energy Economics Seminar. Berkeley, CA; University of California Berkeley, Climate Change Economics Lunch. Berkeley, CA; University of California Davis, Economics and Agricultural and Resource Economics Seminar. Davis, CA; Association For Public Policy Analysis & Management Fall Research Conference. Chicago, IL; University of Arizona Environmental & Energy Economics Workshop (*Discussant*). Tucson, AZ; University of Arizona, Department of Hydrology and Atmospheric Sciences. Tucson, AZ.

2016: University of Arizona, Environmental Breakfast Club. Tucson, AZ; University of Arizona, Agricultural & Resource Economics Department. Tucson, AZ; National Weather Service, Southeast Arizona Office. Tucson, AZ; Arizona Environmental Economists Research Workshop. Tucson, AZ; AERE Sponsored Session at the Western Economic Association International Annual Conference. Portland, OR; Geospatial Analysis of Disasters: Measuring Welfare Impacts of Emergency Relief Workshop. Heidelberg, Germany. National Bureau of Economic Research Summer Institute, Environmental & Energy Economics. Cambridge, MA; Rand Corporation, Applied Microeconomic Seminar Series. Washington DC; Association For Public Policy Analysis & Management Fall Research Conference. Washington, DC; University of Kentucky, Department of Economics. Lexington, KY.

2015: University of Arizona, Center for Climate Adaptation Science and Solutions. Tucson, AZ; Environmental Policy and Research Group. Tucson, AZ; Heartland Environmental & Resource Economics Workshop. Urbana-Champaign, Illinois; AERE Sponsored Session at the Southern Economics Association Annual Meeting. New Orleans, LA.

2014: Oklahoma State University, Department of Agricultural Economics. Stillwater, OK; The University of Oklahoma, Department of Geography and Environmental Sustainability. Norman, OK;

Connecticut College, Department of Economics. New London, CT; U.S. Army Corps of Engineers, Engineer Research and Development Center. Concord, MA; Camp Resources XXI, North Carolina State University. Wrightsville Beach, NC; Society for Risk Analysis Annual Conference. Denver, CO.

2013: The University of Arizona School of Government and Public Policy. Tucson, AZ; The Graduate Institute Geneva Advanced Seminar in Environmental and Resource Economics. Geneva, Switzerland; Fondazione Eni Enrico Mattei and Euro-Mediterranean Center on Climate Change Annual Convention. Venice, Italy; University of Rhode Island Environmental Economics Seminar. Kingston, RI; Italian Society for Climate Scientists 1st Annual Conference. Lecce, Italy; Fondazione Eni Enrico Mattei Research Seminar. Venice, Italy; Euro-Mediterranean Center for Climate Change Research Seminar. Bologna, Italy; 20th Annual Conference of the European Association of Environmental and Resource Economists. Toulouse, France; Cornell University 2nd Northeast Workshop of Energy Policy and Environmental Economics. Ithaca, NY; Yale University School of Forestry & Environmental Studies Doctoral Conference. New Haven, CT; Yale University Environmental Economics Seminar. New Haven, CT; Columbia University Third Interdisciplinary Ph.D. Workshop in Sustainable Development. New York, NY.

2012: Yale University Environmental Economics Seminar. New Haven, CT; Yale University School of Forestry & Environmental Studies Doctoral Conference. New Haven, CT.

2011: Belpasso International Summer School Guest Lecturer and Research Presenter. Belpasso, Italy; Yale University Environmental Economics Seminar. New Haven, CT; Yale University School of Forestry & Environmental Studies Doctoral Conference. New Haven, CT.

2010: Yale University School of Forestry & Environmental Studies Doctoral Conference. New Haven, CT.

2005: 7th Annual Whitman Undergraduate Conference. Walla Walla, WA; 44th Annual Western Regional Sciences Association Conference. San Diego, CA.

Conference Awards: Economics and Benefits Analysis Specialty Group Student Merit Award. Society for Risk Analysis Annual Meeting. 2014; 3rd Place for Best Convention Presentation. Fondazione Eni Enrico Mattei and Euro-Mediterranean Center on Climate Change Annual Convention. 2013; Honorable Mention for Best Conference Paper by a Scientist Under 40. Italian Society for Climate Scientists. 2013.

## Research Employment

Euro-Mediterranean Center for Climate Change. Visiting Researcher. Venice, Italy. 2013.

Economic Insights. Energy Market Report Author and Economist. Portland, OR. 2008 - 2009.

Oregon Department of Environmental Quality. Water Modeling Intern. Portland, OR. 2001, 2005.

City of Walla Walla. Environmental Studies Grant Writing Intern. Walla Walla, WA. 2003.

# Teaching

Awards

Arizona Athletics' Academic Champion Award. 2018.

Theodore H. Koff Outstanding Teacher Award. 2016 & 2017.

#### **Teaching Certificates**

Leader in Classroom Diversity & Inclusion Certificate. University of Arizona. Fall 2018. Certificate of College Teaching Preparation. Yale University. Fall 2013.

#### Courses Taught at the University of Arizona

Causal Inference

**Environmental Management** 

Intermediate Economics for Public Policy

Quantitative Policy Analysis I & II

Statistics for Public Policy II

#### Teaching Fellowships at Yale University

Economics of the Environment and Natural Resources. Spring 2014, Fall 2012, 2011, and 2010. Valuation of the Environment. Spring 2013 and 2012.

#### **Teaching Positions**

Cheju National University Foreign Language Institute. Jeju City, South Korea. 2007 -2008. Fulbright Teaching Grant to South Korea. Seogwipo, South Korea. 2005 - 2006.

#### **Guest Lectures**

Environmental Economics. "Sorting over flood risk and implications for policy reform." Whitman College. 2022.

Water, Society, and Policy Seminar. "My Journey With Water." University of Arizona. 2019, 2020.

Politics, Policy and Governance: The U.S. and the World. "Natural Disasters: The Science and Policy". University of Arizona. 2015, 2016, 2017, 2019.

Introduction to Weather and Climate. "Natural Disaster Policy". University of Arizona. 2018.

Climate Change Policy. "Oceans". University of Arizona. 2018.

Sustainability in Environmental Policy. "Warning versus Seeing: Learning from Public Risk Information Under Conflicting Signals". University of Arizona. 2016.

Fourth Annual Conference on Renewable Energy Science, Technology, and Policy. "Energy Economics and Policy Tutorial". University of Arizona. 2015.

Green Economy. "An Overview of Energy Markets, Externalities, and Policy Solutions". University of Arizona. 2015.

Environmental Economics. "The Economics of Air and Water Quality". University of Arizona. 2015.

Arid Lands Graduate Seminar. "The Economics of Tropical Cyclones under Climate Change: An Application of Integrated Assessment Modeling". University of Arizona. 2014.

Natural Hazards. "Quantifying Disaster Losses: Techniques, Models, and Datasets". University of Oklahoma. 2014.

Interdisciplinarity in Environmental Research. "Integrated Assessment Models". Yale University. 2013.

Valuing the Environment. "Contingent Valuation and Non-Use Values". Yale University. 2013.

Economics of the Environment and Natural Resources. "Hotelling and Nonrenewable Resource Management". Yale University. 2012.

Economics of the Environment and Natural Resources. "The Travel Cost Method". Yale University. 2011.

Economics of the Environment and Natural Resources. "Nontimber Forest Products". Yale University. 2010.

Public Policy and NGOs. "Environmental Learning in South Korea". Cheju National University. 2008.

### Advising

Current Ph.D. Committees

Logan Blair (Committee Chair), Amanda Leinberger, Laura McCann

Former Ph.D. Committees (first placement)

Emily Bell (2018; University of California, Davis, Post-Doc)

Caroline Hopkins, Carnegie Mellon University, Outside Reader (2021; Federal Housing Finance Agency)

Ladd Keith (2019; University of Arizona)

Qianhui Li, Committee Chair (2021; Arizona Commerce Authority)

Leah Pieper (2021; Clayton State University)

Other graduate advising

Master of Public Administration

Master of Public Policy (including Capstone project)

Master of Water, Society, and Policy

Ph.D. Minor in Global Change

Undergraduate Research Fellowship

#### Service and Outreach

#### Service

University of Arizona, School of Government and Public Policy, Executive Committee. 2021 - Present.

Economics of Disasters and Climate Change, Journal Board Member. 2016 - Present.

Muaebak Institute of Global Warming Studies, Advisory Board Member. 2016 - Present.

University of Arizona, Master of Public Administration and Master of Public Policy Committee. 2015 - Present.

University of Arizona, 4 hiring committees, 2015 - Present.

University of Arizona, Financial Sustainability Emergency Response Taskforce, Capital Projects, Debt, & Investments. Workgroup Member. 2020 - 2021.

Commission for Environmental Cooperation, Flood Costing Methodologies, Project Contributor. 2019 - 2021.

University of Arizona, M.S. in Water, Society, and Policy Executive Committee. 2017 - 2020.

Arizona Environmental Economists Research Workshop, Lead Organizer. 2016.

#### Outreach

National Weather Service. SKYWARN Severe Weather Spotter. 2016 - Present. Big Brothers Big Sisters of Tucson. Mentoring for College and Career Program. 2016 - Present.

### Referee Service

American Economic Journal: Economic Policy, American Journal of Agricultural Economics, Annals of the American Association of Geographers, Cityscape, Climatic Change, Disaster Medicine and Public Health Preparedness, Disasters, Ecological Economics, Environment and Development Economics, Economics and Human Biology, Environment Systems and Decisions, Food Policy, Global Environmental Change, International Journal of Disaster Risk Reduction, Journal of the Association of Environmental and Resource Economists, Journal of Benefit-Cost Analysis, Journal of Environmental Economics and Management, Journal of Environmental Planning and Management, Journal of International Humanitarian Action, Journal of Policy Analysis and Management, Journal of Public Economics, Journal of Urban Economics, Land Economics, National Science Foundation (ad hoc, panel), Natural Hazards, Natural Hazards Review, Nature, Nature Climate Change, Palgrave Macmillan (book proposal), PLOS One, Policy Studies Journal, Population and Environment, Regional Science and Urban Economics, Review of Economic Studies, Risk Analysis, Rutledge (textbook proposal), Sloan Foundation, Southern Economic Journal, Sustainability, Water Security, Weather, Climate, and Society, World Development

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