# **CAROLYN KOUSKY**

# Environmental Defense Fund <u>ckousky@edf.org</u>

### **Education**

Ph.D., Public Policy, Harvard University, John F. Kennedy School of Government, 2008

B.S., Earth Systems, Stanford University, 2002, graduated with honors and distinction

### **Areas of Expertise**

Climate Risk Management and Climate Adaptation Household and Community Resilience Risk Management and Insurance Environmental and Natural Resource Economics

## **Professional Experience**

Associate Vice President for Economics and Policy, Environmental Defense Fund, 2022 - present

Executive Director, Risk Management and Decision Processes Center, Wharton School of the University of Pennsylvania, Philadelphia, PA, 2019 – 2022

Adjunct Professor, Operations, Information, and Decisions Department, Wharton School of the University of Pennsylvania, Philadelphia, PA, 2018 – present Courses taught: Environmental Sustainability and Value Creation

Risk Analysis and Environmental Management

Penn Institute for Urban Research Fellow, University of Pennsylvania, Philadelphia 2018 – present

Director of Policy Research and Engagement, Risk Management and Decision Processes Center, Wharton School of the University of Pennsylvania, Philadelphia, PA, 2017 - 2019

Affiliate, Penn Program on Regulation, University of Pennsylvania, Philadelphia 2017 – present

University Fellow, Resources for the Future, Washington, D.C., 2017 – present

Fellow, Resources for the Future, Washington, D.C., 2008 – 2017

#### **Other Professional Activities**

- Author, Fifth National Climate Assessment, Economics Chapter, 2021 present
- Member, Infrastructure, Climate, & Sustainability Committee, Mayor Adams transition, New York City, 2021
- Member, Regional Climate Governance and Adaptive Management Working Group, Climate Resilience Research Agenda, City of Philadelphia, 2021
- Member, Roundtable on Risk and Resilience of Extreme Events, National Academies of Sciences, Engineering, and Medicine, 2021-2023

Vice-chair, California Climate Insurance Working Group, 2019 – present

Non-resident Scholar, Insurance Information Institute, 2019 - present

Member of the World Economic Forum Advisory Board for the Global Risks Report, 2019 - present

Member of the Advisory Board, First Street Foundation, 2019 – present

- External Advisory Board Member, MIT Norman B. Leventhal Center for Advanced Urbanism, Massachusetts Institute of Technology, 2018 2021
- Member of the Technical Mapping Advisory Council, Federal Emergency Management Agency,
  Department of Homeland Security, 2019 2021
- Member of the Society of Actuaries Catastrophe & Climate Strategic Research Program Advisory Group, 2019 2020

Mentor, Bill Anderson Fund, 2018 - present

Member, Editorial Board of Economics of Disasters and Climate Change, 2016 - present

- Member of the Water Research Network for the Public Policy Institute of California's Water Policy Center, 2015 present
- Member of the Science Review Group, Puerto Rico Recovery Plan Project, RAND Corporation, 2017-2018
- Member, National Research Council Committee on Analysis of Costs and Benefits of Reforms to the National Flood Insurance Program Phase 1, 2013 2016
- Member, Working Group on Flood Insurance Affordability for the NYC Mayor's Office of Long-Term Planning and Sustainability, 2013 2016
- Member, Adaptation and Hazards Indicators Technical Team for the U.S. Global Change Research Program, National Climate Assessment, 2013- 2016

Visiting Scholar, Risk Management and Decision Processes Center, Wharton School of the University of Pennsylvania, Philadelphia, PA, Sept. 2006 – Jan. 2007; 2011–2016

Member, Climate Adaptation Committee of the National Hazards Mitigation Association, 2012-2014

### **Honors and Awards**

Recipient of the X International Julio Castelo Matrán Insurance Award, Fundación MAPFRE, 2018

Recipient of the Tartufari International Prize in the Field of Socio-Economic Assessment of Natural Disasters from the Accademia Nazionale dei Lincei, 2013

Science, Environment, and Development Group, Kennedy School of Government, Harvard University, Doctoral Research Fellow, 2004 – 2008

Harvard Environmental Economics Program, Harvard University, Pre-doctoral Fellow, 2005 – 2008

Lincoln Institute of Land Policy Dissertation Fellowship, 2007 – 2008

Teresa Heinz Scholar for Environmental Research, 2006 – 2007

Joseph Crump Fellowship, Kennedy School of Government, 2005 – 2006

Phi Beta Kappa, 2002

# **Peer-Reviewed Journal Papers**

- Conell-Price, L., C. Kousky, and H. Kunreuther (forthcoming). "Encouraging Resiliency Through Auto-Enrollment in Supplemental Flood Insurance Coverage." *Journal of Risk and Insurance*.
- Kousky, C. (2022). "Insurance-sector Tools to Combat Biodiversity Loss." Science 377(6607): 714-716.
- Gilmore, E. A., C. Kousky, and T. St. Clair (2022). "Climate Change Will Increase Local Government Fiscal Stress in the US." *Nature Climate Change* 12: 216-218.
- Wing, O. E. J., W. Lehman, P. D. Bates, C. C. Sampson, N. Quinn, A. M. Smith, J. C. Neal, J. R. Porter, and C. Kousky (2022). "Inequitable Patterns of US Flood Risk in the Anthropocene." *Nature Climate Change* 12: 156-162,
- Liao, Y. and C. Kousky (2022). "The Fiscal Impacts of Wildfires on California Municipalities." *Journal of the Association of Environmental and Resource Economists*.
- Bradt, J., C. Kousky, and O. Wing (2021). "Voluntary Purchases and Adverse Selection in the Market for Flood Insurance." *Journal of Environmental Economics and Management* 110 (October): 102515.

- Kousky, C., L. Shabman, and H. Wiley (2021). "Can Parametric Microinsurance Improve the Financial Resilience of Low-Income Households in the United States?" *Economics of Disasters and Climate Change*. https://doi.org/10.1007/s41885-021-00088-1
- Kousky, C., H. Kunreuther, S. Xian, and N. Lin (2021). "Adapting our Flood Risk Policies to Changing Conditions." *Risk Analysis* 41(10): 1739-1743. https://doi.org/10.1111/risa.13692
- Netusil, N. R., C. Kousky, S. Neupane, W. Daniel, and H. Kunreuther (2021). "The Willingness to Pay for Flood Insurance." *Land Economics*. doi: 10.3368/wple.97.1.110819-0160R1
- Kousky, C., M. Palim & Y. Pan (2020). Flood Damage and Mortgage Credit Risk: A Case Study of Hurricane Harvey. *Journal of Housing Research* 29.
- Wiley, H. J. P. and C. Kousky (2020). "Speeding Up Post-Disaster Housing Buyouts." Solutions 11(3).
- Kousky, C., H. Kunreuther, M. LaCour-Little, and S. Wachter (2020). "Flood Risk and the U.S. Housing Market." *Journal of Housing Research* 29.
- Wing, O., N, Pinter, P. Bates, and C. Kousky (2020). "New insights into US flood vulnerability revealed from flood insurance big data." *Nature Communications* 11: 1444.
- Kousky, C. and S. Light (2019). "Insuring Nature." Duke Law Journal 69: 323-376.
- Kousky, C., L. Ritchie, K. Tierney, and B. Lingle (2019). "Return on Investment Analysis and its Applicability to Community Disaster Preparedness Activities: Calculating Costs and Returns." *International Journal of Disaster Risk Reduction* 41.
- Wilson, M. T. and C. Kousky (2019). "The Long Road to Adoption: How Long Does it Take to Adopt Updated County-Level Flood Insurance Rate Maps?" *Risk, Hazards, & Crisis in Public Policy* 10(4):403-421.
- Kousky, C. (2019). "The Role of Natural Disaster Insurance in Recovery and Risk Reduction." *Annual Review of Resource Economics* 11(3).
- Kousky, C. (2018). "Financing Flood Losses: A Discussion of the National Flood Insurance Program" *Risk Management and Insurance Review.* 21(1): 11-32.
- Kousky, C. and H. Kunreuther (2018). "Risk Management Roles of the Public and Private Sector." Risk Management and Insurance Review. 21(1): 181-204.
- Kousky, C., P. Raschky, and E. Michel-Kerjan (2018). "Does Federal Disaster Assistance Crowd Out Flood Insurance?" *Journal of Environmental Economics and Management*. 87: 150-164.
- Bin, O., Bishop, J. and C. Kousky (2017). "Does the National Flood Insurance Program have Redistributional Effects?" *B.E. Journal of Economic Analysis and Policy.* DOI: 10.1515/bejeap-2016-0321

- Kousky, C., B. Lingle, and L. Shabman (2017). "The Pricing of Flood Insurance." *Journal of Extreme Events*. 4(2): 1750001.
- Kousky, C. and L. Shabman (2017). "Funding Flood Risk Management: Pre- or Post-Disaster?" Water Economics and Policy. 3(1): 1771001.
- Kousky, C. (2017). "Disasters as Learning Experiences or Disasters as Policy Opportunities? Examining Flood Insurance Purchases after Hurricanes." *Risk Analysis* 37(3): 517-530.
- Epanchin-Niell, R., C. Kousky, A. Thompson, and M. Walls (2016). "Threatened Protection: Sea Level Rise and Coastal Protected Lands of the Eastern United States." *Ocean and Coastal Management*. 137(March 1):118-130.
- Kousky, C. (2016). "Impacts of Natural Disasters on Children." Future of Children. 26(1):73-92.
- H. Fell and C. Kousky (2015). "The Value of Levee Protection to Commercial Properties." *Ecological Economics*. 119:181-188.
- Kousky, C. and E. Michel-Kerjan (2015). "Examining Flood Insurance Claims in the United States." *Journal of Risk and Insurance*. 84(3): 819-850.
- Walls, M., C. Kousky, and Z. Chu (2015). "Is What You See What You Get? The Value of Natural Landscape Views." *Land Economics*. 91(1): 1-19.
- Kousky, C. (2015). A Historical Examination of the Corps of Engineers and Natural Valley Storage Protection: The Economics and Politics of "Green" Flood Control. *Journal of Natural Resources Policy Research*. 7(1): 23-40.
- M. Ranson, C. Kousky, M. Ruth, L. Jantarasami, A. Crimmins, and L. Tarquinio (2014). Tropical and Extratropical Cyclone Damages under Climate Change. *Climatic Change*. 127(2): 227-241.
- Kousky, C. and M. Walls (2014). "Floodplain Conservation as a Flood Mitigation Strategy: Examining Costs and Benefits." *Ecological Economics*. 104(August):119-128
- Kousky, C. and H. Kunreuther (2014). "Addressing Affordability in the National Flood Insurance Program." *Journal of Extreme Events*. (1)1: Article ID 1450001.
- Kousky, C. (2014). "Managing Shoreline Retreat: A US Perspective," Climatic Change. 124(1): 9-20.
- Kousky, C. (2014). "Informing Climate Adaptation: A Review of the Economic Costs of Natural Disasters." Energy Economics. 46: 576-592.
- Kousky, C. (2013). "Facts about FEMA Household Disaster Aid: Examining the 2008 Floods and Tornadoes in Missouri." Weather, Climate, and Society, 5(4): 332-344.
- Berger, A. M., Brown, C. L., Kousky, C., Laberteaux, K., and R. Zeckhauser (2013). "Where Americans Live: A Geographic and Environmental Tally." *Harvard Journal of Real Estate*, 1(1): 39-49.

- Kousky, C., S. M. Olmstead, M. A. Walls, and M. Macauley (2013). "Strategically Placing Green Infrastructure: Cost-Effective Land Conservation in the Floodplain." *Environmental Science & Technology*, 47(8): 3563–3570.
- Kousky, C. and R. Cooke (2012). "Explaining the Failure to Insure Catastrophic Risks." *The Geneva Papers on Risk and Insurance Issues and Practice*, 37(2): 206-227.
- Bin, O., Bishop, J., and C. Kousky (2012). "Redistributional Effects of the National Flood Insurance Program." *Public Finance Review*, 40(3): 360-380.
- Cooley, D. M, Galik, C. S., Holmes, T. P., Kousky, C., and Cooke, R. M. (2012). "Managing Dependencies in Forest Offset Projects: Toward a More Comprehensive Evaluation of Reversal Risk." *Mitigation and Adaptation of Strategies for Global Change*, 17(1): 17-24.
- Kousky, C., Kopp, R. E., and R. M. Cooke (2011). "Risk Premia and the Social Cost of Carbon: A Review." Economics: The Open-Access, Open-Assessment E-Journal, Vol. 5, 2011-21.
- Kousky, C. (2011). "Managing Natural Catastrophe Risk: State Insurance Programs in the United States." Review of Environmental Economics and Policy, 5(1): 153-171.
- Kousky, C. (2011). "Understanding the Demand for Flood Insurance." *Natural Hazards Review*, 12(2): 96-110.
- Berger, A., Brown, C., Kousky, C. and Zeckhauser, R. (2011) "Perspective: The Challenge of Degraded Environments: How Common Biases Impair Effective Policy." Risk Analysis, 31(9) 1423-1433.
- Kousky, C. (2010). "Using Natural Capital to Reduce Disaster Risk." *Journal of Natural Resources Policy Research*, 2(4): 343-356.
- Kousky, C. and H. Kunreuther (2010). "Improving Flood Insurance and Flood Risk Management: Insights from St. Louis, Missouri." *Natural Hazards Review*. 11(4): 162-172.
- Kousky, C. (2010). "Learning from Extreme Events: Risk Perceptions After the Flood." *Land Economics*. 86(3): 395-422.
- Michel-Kerjan, E. and C. Kousky (2010). "Come Rain or Shine: Evidence on Flood Insurance Purchases in Florida." *Journal of Risk and Insurance*. 77(2): 369-397.
- Brennan, T., C. Kousky, and M. Macauley (2010). "More Than a Wing and a Prayer: Government Indemnification of the Commercial Space Launch Industry." *Risk, Hazards & Crisis in Public Policy.* Vol. 1: Iss. 1, Article 7.
- Jack, B. K., C. Kousky, and K. E. Sims (2008). "Designing Payments for Ecosystem Services: Lessons from Previous Experience with Incentive-based Mechanisms." *Proceedings of the National Academy of Sciences*. 105(28): 9465-9470.
- Kousky, C., S. Walsh, and R. Zeckhauser (2007). "Options Contracts for Contingent Takings." *Issues in Legal Scholarship*. Catastrophic Risks: Prevention, Compensation, and Recovery: Art. 2.

- Kousky, C., E. F. P. Luttmer, and R. J. Zeckhauser (2006). "Private Investment and Government Protection." *Journal of Risk and Uncertainty* 33(1/2): 73-100.
- Kousky, C. (2006). Using Ecosystem Services to Reduce Disaster Losses. *Risk Management Review* Fall: 9-10.
- Kousky, C. and S. H. Schneider (2003). Global Climate Policy: Will Cities Lead the Way? *Climate Policy* 3: 359-372.

### **Books and Book Chapters**

- Kousky, C. (2022). Understanding Disaster Insurance: New Tools for a More Resilient Future. Washington, DC: Island Press.
- Kousky, C., B,. Fleming, and A. Berger, eds. (2021). A Blueprint for Coastal Adaptation. Washington, DC: Island Press.
- Kousky, C. (2021). Insurance and Coastal Adaptation. In: A Blueprint for Coastal Adaptation, eds C. Kousky, B. Fleming, and A. Berger. Washington, DC: Island Press: 154-168.
- Kousky, C. (2020). Catastrophic Risk Transfer in a Post-Pandemic World. In: Challenges and Opportunities in the Post-COVID-19 World. Geneva, World Economic Forum: 40-43.
- Kousky, C. (2019). Threats to Insurability. In: The Future of Risk Management, ed Kunreuther, H. et al. Phildelphia, Penn Press: Chapter 14.
- Kousky, C. (forthcoming). Managing Shoreline Retreat. In: Planning for Climate Change: A Reader in Green Infrastructure and Sustainable Design for Resilient Cities, eds Hamin, Elisabeth, Yaser Abunnasr, Robert L. Ryan. New York: Routledge Press.
- Kousky, C. (2017). Revised Risk Assessments and the Insurance Industry. In: Policy Shock:
  Regulatory Responses to Oil Spills, Nuclear Accidents, and Financial Crashes, ed Balleisen, E., L.
  Bennear, K. Krawiec, and J. Wiener. Cambridge University Press: 58-81.
- Kousky, C. (2016). A Historical Examination of the Corps of Engineers and Natural Valley Storage Protection: The Economics and Politics of 'Green' Flood Control. In: Designing Water Disaster Management Policies: Theory and Empirics, ed C Gopalakrishnan. New York, NY, Rutledge: Chapter 3.
- National Research Council (2015). Affordability of National Flood Insurance Program Premiums: Report 1. Washington, DC, The National Academies Press.
- Kousky, C. (2015). Evaluation of New York City's Watershed Agricultural Program. In: *Use of Economic Instruments In Water Policy: Insights from International Experience*, eds M. Lago, J. Mysiak, C. Mario Gomez, G. Delacamara, and A. Maziotis. Springer: Chapter 29.

- Kousky, C. (2013). Using Natural Capital to Reduce Disaster Risk. In: *Toward Disaster Risk Reduction: A Policy Focused Approach for Natural Hazards and Disasters*, eds J. K. Levy and C. Gopalakrishnam. Routledge: Chapter 3.
- Kousky, C. and R. Cooke (2012). The Value of Information in a Risk Management Approach to Climate Change. In: *The Value of Information: Methodological Frontiers and New Applications in Environment and Health*, eds R. Laxminarayan and M. Macauley. New York City, Springer: 19-30.
- Kousky, C., S. M. Olmstead and R. Sedjo (2011). Harm's Way: Homeowner Behavior and Wildland Fire Policy. In *Wildfire Policy: Law and Economics Perspectives*, eds K. M. Bradshaw and D. Lueck. New York City, Routledge: 178-199.
- McKenzie, E., Irwin, F., Ranganathan, J., Hanson, C., Kousky, C., Bennett, K., Ruffo, S., Conte, M., Salzman, J., Paavola, J. (2011). Incorporating Ecosystem Services in Decisions. In *Natural Capital: Theory and Practice of Mapping Ecosystem Services*, eds Kareiva, P., Tallis, H., Ricketts, T. H., Daily, G. C, Polasky, S. Oxford, University Press.
- Cooke, R., Kousky, C., and H. Joe (2011). Micro-Correlations and Tail Dependence. In *Dependence Modeling: Vine Copula Handbook*, eds. D. Kurowicka and H. Joe. London, World Scientific: 89-112.
- Kousky, C., S. Walsh and R. Zeckhauser (2010). Options Contracts for Contingent Takings. In *Disaster Law*, eds. D. Farber and M. G. Faure. UK, Edward Elgar Publishing.
- Kousky, C. and R.M. Cooke (2010). The Limits of Securitization: Micro-correlations, Fat Tails and Tail Dependence. In *Re-Thinking Risk Measurement and Reporting: Uncertainty, Bayesian Analysis and Expert Judgment*, ed K. Boecker. London, UK: Risk Books: 273-293
- Kousky, C., J. Pratt, and R. Zeckhauser (2010). Virgin Versus Experienced Risks: Why Do We Adopt A Different Attitude? In *The Irrational Economist: Making Decisions in a Dangerous World*, eds. E. Michel-Kerjan and P. Slovic. New York, NY: Public Affairs Books.
- Berger, A., C. Brown, C. Kousky, and R. Zeckhauser (2010). The Five Neglects: Risks Gone Amiss. In *Learning from Catastrophes*, eds. H. Kunreuther and M. Useem. Upper Saddle River, New Jersey: Wharton School Publishing.
- Berger, A., C. Kousky, and R. Zeckhauser (2008). Obstacles to Clear Thinking about Natural Disasters: Five Lessons for Policy. In *Risking House and Home: Disasters, Cities, Public Policy*, eds. J. M. Quigley and L. A. Rosenthal. Berkeley: Berkeley Public Policy Press.
- De Groot, R., M. De Wit, E. Gaddis, C. Kousky, W. McGhee, M. D. Young (2007). Making Restoration Work: Financial Incentives. In *Restoring Natural Capital: Science, Business and Practice*, eds. J. Aronson, S. Milton, and J. Blignaut. Washington, D.C.: Island Press: 286-302.
- Kousky, C. and R. Zeckhauser (2006). JARring Actions That Fuel the Floods. In *On Risk and Disaster: Lessons from Hurricane Katrina*, eds. R. J. Daniels, D. F. Kettl, and H. Kunreuther. Philadelphia:
  University of Pennsylvania Press: 59-73.

# **Reports and Policy Briefs**

- Netusil, N. R. and C. Kousky (2021). The Coming Storm: How U.S. Cities are Managing Stormwater from Increasingly Extreme Rainfall Events, Wharton Risk Center, University of Pennsylvania, August.
- Braun, A. and C. Kousky (2021). Catastrophe Bonds. Wharton Risk Center Primer, University of Pennsylvania, July.
- Kousky, C. and H. Wiley (2021). Improving the Post-Flood Financial Resilience of Lower-Income Households through Insurance. Wharton Risk Center Issue Brief, January.
- Bernhardt, A., C. Kousky, A. Reed, and C. Sykes (2021). Community-Based Catastrophe Insurance: A Model for Closing the Protection Gap. Marsh & McLennan Companies and the Wharton Risk Center, February.
- Kousky, C., N. R. Netusil, and G. Moldovan-Trujillo (2020). The Mispricing of Flood Insurance: A Look at Portland, Oregon. Wharton Risk Center Issue Brief, December.
- Kousky, C., H, Wiley, and L. Shabman (2020). Can Parametric Microinsurance Improve the Financial Resilience of Low-Income Households in the United States? Wharton Risk Center, September.
- Sengupta, R. and C. Kousky (2020). Parametric Insurance for Disasters. Wharton Risk Center Primer, University of Pennsylvania, September.
- Kousky, C. L. Shabman, Z. Linder-Baptie, and E. St. Peter (2020). Perspectives on Flood Insurance Demand Outside the 100-year Floodplain. Wharton Risk Center Issue Brief, May.
- Kousky, C. and H. Wiley (2020). The Role of Insurance in Coastal Adaptation: Workshop Findings. Philadelphia: Wharton Risk Center, University of Pennsylvania. March.
- Shabman, L. C. Kousky, and B. Lingle (2019). The Mandatory Purchase Requirement: Origins and Effectiveness in Achieving NFIP Goals. Philadelphia: Wharton Risk Center, University of Pennsylvania. September.
- Kousky, C., K. Greig, and B. Lingle (2019). Financing Third Party Wildfire Damages: Options for California's Electric Utilities. Philadelphia: Wharton Risk Center, University of Pennsylvania. January.
- Kousky, C. and B. Lingle (2018). The Three Maps That Explain Residential Flood Insurance. BRINK. September 13.
- Kousky, C. and H. Kunreuther (2018). A Framework for Managing Catastrophic Risks. Wharton Risk Center Issue Brief, August.
- Kousky, C., K. Greig, B. Lingle, and H. Kunreuther (2018). Wildfire Costs in California: The Role of Electric Utilities. Wharton Risk Center Issue Brief, August.

- Kousky, C., H. Kunreuther, B Lingle, and L. Shabman (2018). The Emerging Private Residential Flood Insurance Market in the United States. Wharton Risk Management and Decision Processes Center, July.
- Kousky, C. and B. Lingle (2018). Residential Flood Insurance in Puerto Rico. Wharton Risk Center Issue Brief. March.
- Kousky, C. and B. Lingle (2017). The NFIP's Increased Cost of Compliance Coverage. Wharton Risk Center Issue Brief. Summer.
- Ritchie, L.A., Kousky, C., Domingue, S., Campbell, N., Tierney, K., Vickery, J., and Lingle, B. 2017.

  Assessing the Feasibility of Conducting Social Return on Investment Analyses for "Whole Community" Engagement Activities. Report prepared for the Individual and Community Preparedness Division U.S. Department of Homeland Security, Federal Emergency Management Agency. HSFE20-15-C-0235. Boulder, CO: The University of Colorado, Institute of Behavioral Science.
- Kousky, C. (2017). A Discussion of the National Flood Insurance Program. Policy Brief 17-01. Resources for the Future. Washington, DC, February.
- Kousky, C. (2017). Financing Flood Losses: A Discussion of the National Flood Insurance Program. Resources for the Future. Washington, DC, February.
- Kousky, C. (2017). Examining Flood Map Changes in New Jersey. Prepared for the New Jersey Realtors Governmental Research Foundation. January.
- Kousky, C., B. Lingle and L. Shabman (2017). Understanding the National Flood Insurance Program in New Jersey. Prepared for the New Jersey Realtors Governmental Research Foundation. January.
- Kousky, C., B. Lingle and L. Shabman (2016). NFIP Premiums for Single-Family Residential Properties: Today and Tomorrow. Policy Brief 16-10. Resources for the Future. Washington, DC, September.
- Kousky, C., B. Lingle, and L. Shabman (2016). FEMA Public Assistance Grants: Implications of a Disaster Deductible. Policy Brief 16-04. Resources for the Future. Washington, DC, April.
- Kousky, C. and L. Shabman (2015). A Proposed Design for Community Flood Insurance. Washington, DC: Resources for the Future, December.
- RFF and AAAS (2015). The Economic and Financial Risks of a Changing Climate: Insights from Leading Experts. Workshop Report. Washington, DC: Resources for the Future, November 12.
- Kousky, C. and L. Shabman (2015). "Understanding Flood Risk Decisionmaking: Implications for Flood Risk Communication Program Design." RFF Discussion Paper 15-01. Resources for the Future. Washington, DC, February.
- Kousky, C. M. Walls, and Z. Chu (2014). Measuring Resilience to Climate Change: The Benefits of Forest Conservation in the Floodplain. Sample, V. Alaric and Bixler, R. Patrick (eds.). Forest Conservation and Management in the Anthropocene: Conference Proceedings. Proceedings.

- RMRS-P-71. Fort Collins, CO: US Department of Agriculture, Forest Service. Rocky Mountain Research Station.
- Shabman, L., C. Kousky, and D. Woolley (2014). Appendix C: Understanding Decision Making by Communities and Individuals Related to Flood Risk. Shabman and P. Scodari (eds). From Flood Damage Reduction to Flood Risk Management: Implications for USACE Policy and Programs. USACE Institute for Water Resources.
- Shabman, L., P. Scodari, D. Woolley, and C. Kousky (2014). Appendix A: Vocabulary of Flood Risk Management Terms. L. Shabman and P. Scodari (Eds). From Flood Damage Reduction to Flood Risk Management: Implications for USACE Policy and Programs. USACE Institute for Water Resources.
- Kousky, C. and L. Shabman (2013). A New Era of Disaster Aid? Reflections on the Sandy Supplemental. RFF Issue Brief 13-05. Resources for the Future. Washington, DC, December.
- Kousky, C. and H. Kunreuther (2013). Addressing Affordability in the National Flood Insurance Program. RFF Issue Brief 13-02. Resources for the Future. Washington, DC, August.
- Kousky, C. and E. Michel-Kerjan (2012). Hurricane Sandy's Storm Surge and the National Flood Insurance Program: Flood Insurance Coverage in New York and New Jersey. Wharton Risk Center Issue Brief, November.
- Kousky, C. and E. Michel-Kerjan (2012). Hurricane Sandy, Storm Surge, and the National Flood Insurance Program: A Primer on New York and New Jersey. RFF Issue Brief 12-08.
- Kousky, C. and L. Shabman (2012). The Realities of Federal Disaster Aid: The Case of Floods. RFF Issue Brief 12-02.
- Kousky, C. (2012). WP3 Ex-Post Case studies: New York City Watershed Agricultural Program. Evaluating Economic and Policy Instruments for Sustainable Water Management in Europe, January.
- Kousky, C., S. Olmstead, M. Walls, A. Stern, and M. Macauley (2011). Adaptation to Increased Precipitation and Flooding: A Case Study in Wisconsin's Lower Fox River Basin. RFF Report. November.
- Michel-Kerjan, E., C. Kousky, H. Kunreuther, S. Lemoyne de Forges (2011). Informed Decisions on Catastrophe Risk: How Long do Homeowners Keep their Flood Insurance Coverage? Wharton Risk Management and Decision Processes Center, Philadelphia, PA: Summer.
- Kousky, C. and J. Maher (2011). "Introducing Light Rail in Suburbia: The Impact of a New Rail Line on Property Prices in St. Louis County, Missouri." RFF Discussion Paper 11-44. Resources for the Future. Washington, DC, October.
- Scarlett, P. L, Linkov, I., and C. Kousky (2011). "Risk Management Practices: Cross-Agency Comparisons with Minerals Management Service." RFF Discussion Paper 10-67. Resources for the Future. Washington, DC, January.

- Kousky, C. and R. Cooke (2010). Adapting to Extreme Events: Managing Fat Tails. RFF Issue Brief 10-12.
- Cooke, R. and C. Kousky (2010). Climate Dependencies and Risk Management: Microcorrelations and Tail Dependence. RFF Issue Brief 10-13.
- Kousky, C. (2010). Reforming the National Flood Insurance Program. RFF Issue Brief 10-01.
- Kousky, C. and S. Olmstead (2010). "Induced Development in Risky Locations: Fire Suppression and Land Use in the American West." Discussion Paper.
- Kousky, C., Rostapshova, O., Toman, M. A., and R. Zeckhauser (2009). "Responding to Threats of Climate Change Mega-Catastrophes." RFF Discussion Paper 09-45. Resources for the Future, Washington, DC, November.
- Kousky, C. and R. M. Cooke (2009). "Climate Change and Risk Management: Challenges for Insurance, Adaptation, and Loss Estimation." RFF Discussion Paper 09-03. Resources for the Future, Washington, DC, February.
- Luttmer, E. F. P., Zeckhauser, R. J., Kousky, C. Permits to Elicit Information. *National Tax Association Proceedings, 99th Annual Conference*, pp. 163-170, 2007.
- Kousky, C. and Clark, W. (2005) "Institutional Options for Reporting on the State of the Nation's Environment: Lessons from History." Prepared for The H. John Heinz III Center for Science, Economics, and the Environment.

### **Opeds, Articles, and Interviews**

- Kousky, C. (2021). "Stopping Price reform Won't Eliminate Flood Risk." The Hill, April 2.
- Bernhardt, A. and C. Kousky (2021). "Can Parametric Insurance Help Build Disaster Resilience in the U.S.?" *The Insurer*, January 25.
- Kousky, C. (2020). "Why Biden Should Launch an Ecosystem Restoration Corps in 2021." The Hill, December 31.
- Kousky, C. (2020). "A Climate Resilience Roadmap for the Next Administration." Medium, November 12.
- Kousky, C. and C. Martin (2020). "Low-Income Households Should be Prioritized After Disaster Strikes." The Hill, August 31.
- Kousky, C. and A. Read (2020). "Why We Need Community-Based Catastrophe Insurance." BRINK, July 31.
- Kousky, C., B. Collier, A. Braun, and H. Kunreuther (2020). "Preserving Small Business in the Aftermath of the Coronavirus Catastrophe." The Hill. May 4.
- Kousky, C. (2019). "Time for a New Apollo Project: A Climate-Friendly Economy." The Hill. July 27.

- Walls, M., M. Wibbenmeyer, and C. Kousky (2019). "<u>Does the Coastal Barrier Resources Act Provide a</u>
  Policy Template to Address Wildfire Risk?" *Resources*. March 20.
- Kousky, C. (2019). "To Make Sure Its Utilities Survive Climate Change, California Needs Liability Law Reform." *LA Times*. February 25.
- Kousky, C. (2018). "How America Fails at Communicating Flood Risks." City Lab. October 11.
- Kousky, C. (2017). "Look to Caribbean Risk Insurance Model for US Hurricane Recovery." The Hill. September 15.
- Kousky, C. (2017). "How We Can Protect Irma and Harvey Victims from Getting Screwed." Fortune. September 6.
- Kousky, C. (2017). "Flooding and the Economics of Risk Reduction." BRINK. August 31.
- Kousky, C. (2017). "How to Reform Flood Insurance to Keep More Americans Afloat." The Hill. July 5.
- Kousky, C. and L. Shabman (2016). "Is Flood Insurance Too Expensive?" The Hill. December 8.
- Kousky, C. (2016). "At the Intersection of Insurance and Flood Risk." BRINK. September 15.
- Kousky, C. and L. Shabman (2016). "The Role of Insurance in Promoting Resilience." BRINK. July 29.
- Kousky, C. and L. Shabman (2016). "Reducing Risks after the Flood." Resources 194 (Spring).
- Epanchin-Niell, R., C. Kousky, A. Thompson, and M. Walls (2016). "<u>Investing in Coastal Protected Lands under Threat of Sea-Level Rise</u>." *Resources* 194 (Spring).
- Kousky, C. and E. Michel-Kerjan (2016). "Flood Damage in America: Four Key Lessons." BRINK. Feb. 16.
- Kousky, C. (2016). "Managing our floodplains." St. Louis Post Dispatch. January 27.
- Kousky, C. and L. Shabman (2013). "The Hazard of Moral Hazard Or Not." Natural Hazards Observer, May.
- Kousky, C. (2012). "Rethink Development Patterns." New York Times, Room for Debate. July 11.
- Kousky, C. (2012). National Flood Insurance Program. C-SPAN Washington Journal. May 21.
- Olmstead, S. and C. Kousky (2012). "Unnatural Disasters?" Resources 179: 21-23.
- Kousky, C. (2011). "Hurricanes: Who Should Pay?" Baltimore Sun. August 31.
- Kousky, C. and R. Zeckhauser (2011). "The Economics of Flooding." St. Louis Post-Dispatch. June 16.
- Kousky, C. and R. Cooke (2009). "What the Feds can do about Hurricanes." St. Petersburg Times. May 31.

Kousky, C. (2008). "Costs and Risks are Escalating." St. Louis Post-Dispatch. June 30.

#### **Referee Service**

Climatic Change, Climate Policy, Disasters, Economic Inquiry, Environmental Science, Environment and Resource Economics, Environmental Science & Technology, Geneva Papers on Risk and Insurance, Global Environmental Change, International Economic Review, Land Economics, Journal of Environmental Economics and Management, Journal of Policy Analysis and Management, Journal of Public Economics, Journal of Risk and Insurance, Natural Hazards, Oxford Research Encyclopedia of Natural Hazard Science, Public Economics, Regional Science and Urban Economics, Risk Analysis, Risk Management and Insurance Review, Sustainability, Weather, Climate & Society.

#### **Select Media Citations**

Associated Press, Bloomberg, Bloomberg TV (What'd You Miss?), Business Insurance, Business Radio (powered by Wharton), CBS Evening News, Daily Beast, Dallas Morning News, E&E News, Financial Times, The Hill, LA Times, Minneapolis Star Tribune, New Jersey Spotlight News, NPR All Things Considered, NPR Marketplace, Tampa Bay Times, The New York Times, The Take Away (WNYC Radio), San Diego Union-Tribune, USA Today, Utility, Dive, Wall Street Journal, Washington Post.

### **Select Grants**

National Science Foundation. Civic Innovation Challenge Phase II. 2021-2022. \$978,068

National Science Foundation. Megalopolitan Coastal Transformation Hub. 2021-2026. University of Pennsylvania award: \$1.75 million

National Science Foundation. Civic Innovations Phase I. 2021. \$49,658.

Lloyds Tercentenary Research Foundation. 2020. £241,293.

National Science Foundation. CoPe EAGER: Innovative Finance. 2019 - 2021. \$299,779.

- Department of Homeland Security Flood Apex Program. Extension: The Future of Flood Insurance. 2019. \$315,417.
- Department of Homeland Security Flood Apex Program. Evaluating the Private Flood Insurance Market. 2017 2018. \$309,348.
- U.S. Corps of Engineers (through Abt). Water Resources Priority Study. 2016-2017. \$258,206.
- Federal Emergency Management Agency (through University of Colorado). ROI for Measures to Increase Community Resilience. 2015 2017. \$154,000.

- New York Community Trust. Developing Resilient Communities: A New Option for the National Flood Insurance Program. 2014 2015. \$100,000
- Litterman Fund. Rethinking Risk Initiative. 2014 2015. \$50,000.
- National Oceanic and Atmospheric Administration. Creating Resilience to Climate Change: Cost-Effective Land Conservation in the Floodplain. 2012 2015. \$286,555.
- Sloan Foundation (through New York University). Assessing Incentives for Uptake and Distributional Consequences of the National Flood Insurance Program. 2013 2015. \$45,753.
- National Academies Keck Futures Initiative. The Challenge and Opportunities for Integrating Ecosystem Services into Federal Policy: A Case Study of Flood Mitigation in the US Army Corps of Engineers. 2012 2014. \$100,000.
- National Science Foundation. Individual Decisions in the Face of Natural Hazards: An Analysis of Decades of Flood Insurance Purchases, Claims Filed, and Risk Management under the National Flood Insurance Program. 2011 2014. \$78,208.
- National Science Foundation. Measuring Risks from Fat Tails, Tail Dependence, and Micro-Correlations. 2010 2013. \$252,090.
- US Forest Service. Wildland Fire Suppression and Land Development. 2010 2012. \$146,293.
- U.S. Corps of Engineers (through Abt). Improving the Corps of Engineers Contribution to Flood Risk Management. 2009 2011. \$75,000.

The World Bank. Incorporating Climate Change Catastrophe Risk. 2009. \$31,500.

Updated: August 2022