Dartmouth College Thayer School of Engineering Hinman 8000, 15 Thayer Dr Hanover, NH 03755 adam.b.pollack@dartmouth.edu https://abpoll.github.io/ abpoll Adam Pollack \$\gamma\$

### **Adam Pollack**

## research

Equity in climate risk management

Values informed decision-making under uncertainty

Flood risk dynamics in housing markets

Uncertainty in flood risk valuation and estimation Reproducibility and usefulness of scientific practices

#### appointments

### **Dartmouth College**

Postdoctoral Research Associate, Thayer School of Engineering, 2022-present.

adviser: Klaus Keller

#### education

#### **Boston University**

Ph.D, Earth & Environment, 2022.

dissertation: Flood Risk Valuation and Estimation from County to Continental Scales advisers: Christoph Nolte and Ian Sue Wing

### Stony Brook University

M.S., Applied Mathematics and Statistics, 2016. B.S., Applied Mathematics and Statistics, 2016.

## grants and contracts

**Co-Principal Investigator**, "Contribute to the Integrated Coastal Modeling (ICoM) project, Subaward to Dartmouth College from Battelle". PI: Klaus Keller. DOE-Prime, \$231,794. 2023–2024.

## journal articles

- Gourevitch, J. D., Kousky, C., Liao, Y., Nolte, C., **Pollack, A. B.**, Porter, J. R., and Weill, J. A. **2023**. Unpriced climate risk and the potential consequences of overvaluation in US housing markets. Nat. Clim. Chang., pp. 1–8. DOI: 10.1038/s41558-023-01594-8.
- Hennighausen, H., Liao, Y., Nolte, C., and **Pollack, A. 2023**. Flood insurance reforms, housing market dynamics, and adaptation to climate risks. J. Hous. Econ. 62, p. 101953. DOI: 10. 1016/j.jhe.2023.101953.
- Nolte, C., Boyle, K. J., Chaudhry, A., Clapp, C., Guignet, D., Hennighausen, H., Kushner, I., Liao, Y., Mamun, S., **Pollack**, **A.**, Richardson, J., Sundquist, S., Swedberg, K., and Uhl, J. H. **2023**. *Data Practices for Studying the Impacts of Environmental Amenities and Hazards with Nationwide Property Data*. *Land Econ*. DOI: 10.3368/le.100.1.102122-0090R.
- **Pollack, A. B.,** Wrenn, D. H., Nolte, C., and Wing, I. S. **2023**. Potential Benefits in Remapping the Special Flood Hazard Area: Evidence from the U.S. Housing Market. J. Hous. Econ. 61, p. 101956. DOI: 10.1016/j.jhe.2023.101956.
- **Pollack, A. B.** and Kaufmann, R. K. **2022**. *Increasing storm risk, structural defense, and house prices in the Florida Keys. Ecol. Econ.* **194** C. DOI: 10.1016/j.ecolecon.2022.107350.
- **Pollack, A. B.**, Sue Wing, I., and Nolte, C. **2022**. Aggregation bias and its drivers in large scale flood loss estimation: A Massachusetts case study. J. Flood Risk Manag. **15** 4. DOI: 10. 1111/jfr3.12851.
- Castigliego, J. R., **Pollack, A.**, Cleveland, C. J., and Walsh, M. J. **2021**. Evaluating emissions reductions from zero waste strategies under dynamic conditions: A case study from Boston. Waste Manag. 126, pp. 170–179. DOI: 10.1016/j.wasman.2021.02.026.

# preprints & in review

**Pollack, A.**, Campbell, J. E., Condon, M., Cooper, C., Coronese, M., Doss-Gollin, J., Hegde, P., Helgeson, C., Kwakkel, J., Lesk, C., Mankin, J., Mayfield, E., Roth, S., Srikrishnan, V., Tuana, N., and Keller, K. **2023**. *Peer-reviewed climate change research has a transparency problem. The scientific community needs to do better.* 

- **Pollack, A.**, Helgeson, C., Kousky, C., and Keller, K. **2023**. Transparency on underlying values is needed for useful equity measurements.
- **Pollack**, **A.**, Wing, I. S., Pinter, N., and Nolte, C. **2022**. New Empirical Models for Flood Loss Prediction and Implications for the Coterminous United States.

technical reports

- Castigliego, J. R., Walsh, M. J., **Pollack**, **A.**, and Cleveland, C. J. **2019**. *Carbon free Boston:* waste technical report. Tech. rep.
- Hatchadorian, R., Best, R., Wholey, K., Calven, A., Levine, E., and **Pollack, A. 2019**. *Carbon Free Boston: Buildings Technical Report*. Tech. rep.
- Walsh, M. J., Fox-Penner, P., Zheng, K., **Pollack, A.**, and Cleveland, C. J. **2019**. *Carbon Free Boston: Energy Technical Report*. Tech. rep.
- Walsh, M. J., Kinney, P. L., Levy, J. I., Tallon, L., Skipper, N., Russell, A., Castigliego, J. R., **Pollack**, **A.**, Zheng, K., and Cleveland, C. J. **2019**. *Carbon Free Boston: Technical Summary*. Tech. rep.

invited talks

- "Reproducible science is a foundation of convergence research", MACH Seminar Series, Megalopolitan Coastal Transformation Hub (MACH). Online, 2024.
- "Transparency on underlying values is needed for useful equity measurements", Working Group on Social-Science Water Research Invited Seminar Talk, Helmholtz Centre for Environmental Research GmbH UFZ. Online, 2024.
- "An Uncertain Structure and Fragility Ensemble (UNSAFE) for Flood Risk Assessments", Bi-Monthly ICoM-MSD Seminar Series, Integrated Coastal Modeling project, Pacific Northwest National Laboratory. Online, 2024.
- "Equity and Deep Uncertainty in Benefit Cost-Analyses Deep Dive", Annual Meeting of the Megalopolitan Coastal Transformation Hub, Rutgers University-Camden. Camden, New Jersey, 2023.
- "Supporting Integration Through MACH Prototype Decision-Analyses", Integration Meeting of the Megalopolitan Coastal Transformation Hub, *Rutgers University*. Remote Presentation, 2022.
- "Using Toy Problems to Improve Intuition, Convergent Research Designs, and Decision-Support", Seminar Meeting of the Megalopolitan Coastal Transformation Hub, Rutgers University. Remote Presentation, 2022.
- "Do markets price weather-related risks?", Climate Econometrics Seminar Series, Climate Econometrics, Nuffield College, University of Oxford. Remote Presentation, 2021.
- "Flood Loss Risk and Its Drivers: Evidence from Massachusetts Residential Properties", 2020 Climate and Health Seminar, *Boston University School of Public Health*. Remote Presentation, 2020.
- "Parcel level flood risk and interventions in Massachusetts", Cloud to Street Lab Meeting, Cloud to Street. Remote Presentation, 2020.
- "Panama Papers: Temporal and Spatial Trends in Entity Formation", Symposium on Big Data, Human Health and Statistics, *University of Michigan*. Ann Arbor, MI, 2016.

conference papers

- **Pollack**, **A.**, Helgeson, C., Kousky, C., and Keller, K. **2023**. *Transparency on underlying values is needed for useful equity measurements*. 2023 American Geophysical Meeting Fall Meeting (San Francisco, CA).
- **Pollack, A.**, Sue Wing, I., Pinter, N., Schaefer, K., and Nolte, C. **2021**. *Can property level flood losses be reliably predicted?* 2021 American Geophysical Meeting Fall Meeting (Remote).
- **Pollack, A.** and Kaufmann, R. **2020**. *Market prices for weather-related risk: Hurricane Irma and house prices in the Florida Keys*. 2020 American Geophysical Union Fall Meeting (Remote).
- **Pollack, A.** and Kaufmann, R. **2020**. *Pricing weather-related risk mitigation in coastal housing markets: insights from the Florida Keys after Hurricane Irma*. 2020 Association of Environmental and Resource Economists Summer Conference (Remote).
- **Pollack, A.**, Sue Wing, I., and Nolte, C. **2020**. Flood Loss Risk and Its Drivers: Evidence from Massachusetts Residential Properties. 2020 American Geophysical Union Fall Meeting (Remote).

**Pollack, A.**, Sue Wing, I., and Nolte, C. **2020**. *High-resolution flood loss estimates are necessary for effective flood risk management*. 2021 Northeast Agricultural Regional Economics Association Annual Meeting (Remote).

workshop presentations

- "CoPe Cross-Hub Community of Practice: Successes and struggles on the path to convergence research", CoPe Cross-Hub Community of Practice Seminar, *National Science Foundation*. Remote Presentation. November. 2023.
- "Transparency on underlying values is needed for useful equity measurements", Annual Conference of the Society of Decision Making Under Deep Uncertainty, Society of Decision Making Under Deep Uncertainty. Delft, Netherlands (Poster). October. 2023.
- "Transparency on underlying values is needed for useful equity measurements", Advancing Complex Adaptive Human-Earth Systems Science in a World of Interconnected Risks, *MultiSector Dynamics*. Davis, California (Poster). October. 2023.
- "Flood risk signals in the property market and implications for flood risk management", 2022 ZTRAX Special Issue Workshop, *Journal of Housing Economics and Land Economics*. Remote Presentation. August. 2022.
- "Can property level losses be reliably predicted?", 2021 PLACES Webinar: Land, Water, and ZTRAX, Boston University. Remote Presentation. June. 2021.
- "Can property level flood losses be reliably predicted?", First Street Foundation Flood Lab Workshop, First Street Foundation. Remote Presentation. June. 2021.
- "Geo-locating ZTRAX", 2020 PLACES Webinar, *Boston University*. Remote Presentation. June. 2020.
- "Data Inputs to Hedonic Flood Risk Models", 2020 PLACES Webinar, *Boston University*. Remote Presentation, June. 2020.

peer review

Business & Economics Land Economics Water Resources Research

awards

Research Fellowship, Boston University, 2022. Research Fellowship, Boston University, 2021. Teaching Fellowship, Boston University, 2021. Research Fellowship, Boston University, 2020. Teaching Fellowship, Boston University, 2020. Research Fellowship, Boston University, 2019. Dean's Fellowship, Boston University, 2019.

#### teaching

#### **Boston University**

Data, Models and Analysis in Earth and Environment. Teaching Fellow and Lab Instructor. Spring 2021.

Data, Models and Analysis in Earth and Environment. Teaching Fellow and Lab Instructor. Spring 2020.

### **Dartmouth College**

How to produce FAIR analyses. Developed and Presented Teaching Module in Bayesian Statistical Modeling and Computation Course. Winter 2024.

### **Stony Brook University**

Record #48549028.

Software Development Fundamentals. Teaching Assistant. Spring 2016.

## additional experience

Social and Behavioral Research - Basic, CITI program. 2022–2025.

**Abstract Reviewer**, Northeastern Agricultural Resource Economics Association. 2023–2024

**Notetaker and Rapporteur**, Multisectoral Dynamics Workshop Equity Breakout Sessions. 2023.

- **Co-Chair, Student Postdoc Leadership Council**, Megalopolitan Coastal Transformation Hub. 2022–2023.
- **Lead, Data Integration Working Group**, Megalopolitan Coastal Transformation Hub. 2022–2023.
- **Founder, Irving Institute Research Labs Seminar Group**, Irving Institute for Energy & Society. 2022–2023.
- **Session Chair, Property Values (Flood Risk)**, Association of Environmental and Resource Economists 2020 Virtual Summer Conference. 2020.
- **Summer School Participant**, Summer School on Sustainable Climate Risk Management. 2019.
- Summer School Participant, University of Michigan Big Data Summer Institute. 2016.