

# Daniel A. Brent

Associate Professor

Department of Agricultural Economics, Sociology, and Education

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## Academic Employment

### Pennsylvania State University

Department of Agricultural Economics, Sociology, and Education

- Associate Professor, 2023–present

- Assistant Professor, 2018–2023

### Louisiana State University

Department of Economics

- Assistant Professor, 2015–2018

### Monash University

Department of Economics

- Research Fellow, 2013–2015

## Education

- **Ph.D. in Economics**, University of Washington, 2013
- **M.S. in Economics**, University of Washington, 2010
- **B.S. in Economics and Political Science**, University of Pittsburgh, 2006

## Research Interests

Environmental economics; Water resource economics; Applied econometrics; Causal inference; Financial literacy

## Publications

- Lara, G. R., Brent, D. A., Lassiter, A., & Tian, H. (2025). **Causal effects of urbanization and winter weather on salinity in the Delaware River Basin** *Journal of Environmental Management*, 391, 126288.  
*Working paper*
- Patel, P., Scott, C., & Brent, D. A. (2024). **Four birds with one stone? Opportunities and challenges in adopting solar irrigation for a sustainable water–energy–food nexus with carbon credits** *Water International*.
- Brent, D. A., Ren, Y., & Wrenn, D. (2024). **The distributional impact of FEMA's Community Rating System** *Agricultural and Resource Economics Review*, 52(1), 87–118.  
*Working paper*
- Yavari, R., Wu, H., Grady, C., Brent, D. A., Clark, S., et al. (2023). **Identifying sweet spots for green stormwater infrastructure implementation: A case study in Lancaster, Pennsylvania** *Journal of Sustainable Water in the Built Environment*, 9(3).
- Wang, R., Brent, D. A., & Wu, H. (2022). **Willingness to pay for ecosystem benefits of green stormwater infrastructure in Chinese sponge cities** *Journal of Cleaner Production*, 371, 133462.
- Brent, D. A., Cook, J., & Lassiter, A. (2022). **The effects of eligibility and voluntary participation**

**on the distribution of benefits in environmental programs** *Land Economics*, 98(4), 579–598.  
*Working paper*

- Brent, D. A., Gangadharan, L., Leroux, A., & Raschky, P. A. (2021). **Reducing bias in preference elicitation for environmental public goods** *Australian Journal of Agricultural and Resource Economics*, 66(2), 280–308.  
*Working paper*
- Brent, D. A., Lott, C., Taylor, M., Cook, J., Rollins, K., & Stoddard, S. (2020). **What causes heterogeneous responses to social comparison messages for water conservation?** *Environmental and Resource Economics*, 77, 503–537.  
*Working paper*
- Brent, D. A., & Beland, L. P. (2020). **Traffic congestion, transportation policies, and the performance of first responders** *Journal of Environmental Economics and Management*, 103, 102239.  
*Working paper*
- Arora, R. A., Brent, D. A., & Jaenicke, E. C. (2020). **Is India ready for alt-meat? Preferences and willingness to pay for meat alternatives in India** *Sustainability*, 12, 4377. (Open Access)
- Brent, D. A., & Ward, M. B. (2019). **Price perceptions in water demand** *Journal of Environmental Economics and Management*, 98, 102266.  
*Working paper*
- Dorner, Z., Brent, D. A., & Leroux, A. (2019). **Preferences for intrinsically risky attributes** *Land Economics*, 95(4), 494–514.  
*Working paper*
- Brent, D. A., & Chan, N. W. (2019). **Local public goods and the crowding-out hypothesis: Evidence from civic crowdfunding** *Economics Bulletin*, 39(3), 2142–2154.  
*Working paper*
- Brent, D. A., & Lorah, K. (2019). **The economic geography of civic crowdfunding** *Cities*, 90, 122–130.  
*Working paper*
- Brent, D. A., Gangadharan, L., Mihut, A., & Villeval, M. C. (2019). **Taxation, redistribution, and observability in social dilemmas** *Journal of Public Economic Theory*, 21(5), 826–846.  
Working paper  
Media: Dublin Inquirer
- Brent, D. A., & Ward, M. B. (2018). **Energy efficiency and financial literacy** *Journal of Environmental Economics and Management*, 90, 181–216.  
*Working paper*
- Beland, L. P., & Brent, D. A. (2018). **Traffic and crime** *Journal of Public Economics*, 160, 96–116.  
*Working paper*  
Media: New York Times; The Conversation; Scientific American; Salon; KCRW Los Angeles (NPR); BBC 5 Live (UK)
- Brent, D. A., & Gross, A. (2018). **Dynamic road pricing and the value of time and reliability** *Journal of Regional Science*, 58(2), 330–349.  
*Working paper*  
Media: Atlantic Cities; Sightline Daily; City Observatory
- Brent, D. A., Gangadharan, L., Lassiter, A., Leroux, A., & Raschky, P. A. (2017). **Valuing environmental services provided by local stormwater management** *Water Resources Research*, 53(6), 4907–4921.  
*Working paper*

- Brent, D. A., Friesen, L., Gangadharan, L., & Leibbrandt, A. (2017). **Behavioral insights from field experiments in environmental economics** *International Review of Environmental and Resource Economics*, 10(2), 95–143.  
*Working paper*
- Brent, D. A. (2017). **The value of heterogeneous property rights and the costs of water volatility** *American Journal of Agricultural Economics*, 99(1), 73–102.  
*Working paper Appendix*
- Brent, D. A., Cook, J. H., & Olsen, S. (2015). **Social comparisons, household water use, and participation in utility conservation programs: Evidence from three randomized trials** *Journal of the Association of Environmental and Resource Economists*, 2(4), 597–627.  
*Working paper*  
*Appendix*
- Brent, D. A., & Rabotyagov, S. (2013). **Land use change from biofuels derived from forest residue: A case of Washington State** *Economics Research International*, 2013.

## Working Papers

- **Peer effects in voluntary environmental programs: An application to urban water quality** (with Gabe Lara; Douglas Wrenn; Joe Cook) — *Revise & Resubmit, Journal of the Association of Environmental and Resource Economists*
- **Do behavioral nudges interact with prevailing economic incentives? Pairing experimental and quasi-experimental evidence from water consumption** (with Casey Wichman) — *Under review*
- **Financial literacy, student debt, and academic achievement** (with Douglas Wrenn) — *Under review*
- **Conservation and distributional consequences of pricing scarce water during droughts** (with Casey Wichman; Derek Wietelman) — *Under review*
- **Behavioral responses to two-part tariffs: Evidence from the introduction of volumetric water pricing** (with Praharsh Patel; Casey Wichman) — *In preparation*
- **Vulnerabilities to salinity risks from climate change and development in the Delaware River Basin** (with Gabriel Lara; Allison Lassiter; Hui Tan) — *In preparation*
- **Consumer value of information and the behavioral response to carbon and calorie food labels** (with Amit Sharma) — *In preparation*
- **Estimating water demand at the intensive and extensive margin** — *In preparation*

## Work in Progress

- Flood risk perceptions, information, and the demand for adaptation (with Ishani Palandurkar)
- Experimental evidence on the voluntary adoption and demand response to time-varying electricity rates (with Andrea La Nauze; Nathan Eisner; Casey Wichman)
- Valuing clean water from abandoned mine reclamation (with Ishani Palandurkar)

## **Reports & Other Publications**

- Cook, J. H., & Brent, D. A. (2021).  
*Do households respond to marginal or average price of piped water services?*  
Oxford Research Encyclopedia of Global Public Health.
- Brent, D. A. (2015).  
Review of *Living with Water Scarcity* by David Zetland.  
*Water Economics and Policy*, 01, 158003.
- Brent, D. A., Leibbrandt, A., & Smith, L. (2014).  
*Economic incentives for managing peak electricity demand: Review, options, and context analysis.*  
Melbourne, Australia, pp. 1–38.
- Yoder, J., Adam, J., Brady, M., Cook, J., Katz, S., Brent, D., Johnston, S., Malek, K., McMilan, J., & Yang, Q. (2014).  
*Benefit-cost analysis of the Yakima Basin Integrated Plan projects.*  
State of Washington Water Research Center.

## **Teaching Experience**

**Pennsylvania State University** - Applied Microeometrics II (PhD) - Personal Financial Decision-Making - Economic Analysis of Environmental and Resource Policies - Environmental Economics and Policy - Economic Principles of Agribusiness Management

**Louisiana State University** - Environmental Economics - Intermediate Microeconomic Theory - Principles of Microeconomics

**University of Washington** - Intermediate Microeconomics - Introductory Microeconomics

## **Advising**

### **Advisor**

- Ishani Palandurkar — EEEF PhD, Penn State (Expected 2027)
- Praharsh Patel — EEEF PhD, Penn State (Expected 2025)
- Gabriel Lara — EEEF PhD, Penn State (Co-advisor; Expected 2025)
- Yongwang Wang — EEEF PhD, Penn State (2024)
- Rashmit Arora — EEEF MS, Penn State (Co-advisor; 2018)

## **Committee Member**

- Xue Xiao Wang — Real Estate PhD, Penn State (2023)
- Arun Regmi — Forest Resources PhD, Penn State (2023)
- Jinglin Feng — EEEF PhD, Penn State (2023)
- Asif Rasool — EEEF PhD, Penn State (2023)
- Rui Wang — Landscape Architecture PhD, Penn State (2023)
- Darrah Peklak — EEEF MS, Penn State (2019)
- Xiagou Li — EEEF PhD, Penn State (2018)
- Jhacova Williams — Economics PhD, Louisiana State University (2018)

## **Grants and Awards**

- **NSF** — CLIMA: Climate-resilient infrastructure adaptations for maladaptive levee networks (Co-PI), \$757,974, 2023–2026
- **USDA NIFA** — Evaluating and Improving the Integrity of Riparian Buffers for Achieving Water Quality Benefits (Co-PI), \$750,000, 2023–2026

- **USDA NIFA** — Developing Evidence-Based Guidelines for Sustainable Diet Offerings (Co-PI), \$299,887, 2023–2025
- **PA Sea Grant (NOAA)** — Vulnerabilities to salinity risks in the Delaware River Basin (PI), \$124,934, 2022–2024
- **PA Sea Grant (NOAA)** — Ecosystem services assessment for green stormwater infrastructure (Co-PI), \$120,000, 2022–2024
- **Penn State IEE Seed Grant** — Solar irrigation adoption in India (PI), \$29,479, 2021
- **Bruce Gardner Memorial Prize for Applied Policy Analysis**
- **Washington State University CAHNRS Team Interdisciplinary Award**

### **Professional Associations**

- American Economic Association
- Association of Environmental and Resource Economists
- Agricultural and Applied Economics Association
- Urban Economics Association

### **Referee Service**

Agricultural Economics; American Economic Journal: Economic Policy; American Journal of Agricultural Economics; Ecological Economics; Economic Inquiry; Environmental and Resource Economics; Energy Economics; Environmental Resource Letters; Journal of Economic Behavioral and Organization; Journal of the Association of Environmental and Resource Economists; Journal of the European Economics Association; Journal of Environmental Economics and Management; Journal of political Economy: Microeconomics; Journal of Public Economics; Journal of Regional Science; Management Science; Marine Resource Economics; Nature Water; Proceedings of the National Academy of Science; Resource and Energy Economics; Quarterly Journal of Economics; Water Resources Research; Weather, Climate, and Society; and others.

### **Professional Experience**

#### **Private Consulting**

- Shield (2022): Benefit–cost analysis of digital siren and bullhorn
- Yakima Basin Integrated Plan (2014): Agricultural sector benefits
- SP AusNet & BehaviourWorks Australia (2014): Peak electricity demand incentives
- City of Phoenix Water Services Department (2013): Satellite-based classification for residential water demand

**Research Appointments** - Research Associate, Sergey Rabotyagov, University of Washington SEFS (2011–2013) - Research Assistant, Hendrik Wolff, University of Washington Economics (2011) - Survey Statistician, U.S. Department of Energy (2007–2008)