

Stanford



Lisa Rennels

Postdoctoral Scholar, Environmental Social Sciences

 Curriculum Vitae available Online

Bio

BIO

personal website (more frequently updated): lisarennels.com

PROFESSIONAL EDUCATION

- Doctor of Philosophy, University of California, Berkeley , Energy and Resources (2024)
- Master of Science, University of California, Berkeley , Computer Science (2022)
- Master of Science, University of California, Berkeley , Energy and Resources (2020)
- Bachelor of Arts, Dartmouth College , Environmental Studies (2014)

LINKS

- My Personal Website: lisarennels.com

Research & Scholarship

LAB AFFILIATIONS

- Marshall Burke, ECHO: Environmental Change and Human Outcomes Lab (10/18/2024)
- Ines Azevedo, Interdisciplinary Energy Systems (INES) Research Group (10/18/2024)

Publications

PUBLICATIONS

- **Valuing wildfire smoke-related mortality benefits from climate mitigation.** *Proceedings of the National Academy of Sciences of the United States of America*
Qiu, M., Callahan, C. W., Higuera-Mendieta, I., Rennels, L., Parthum, B., Diffenbaugh, N. S., Burke, M.
2026; 123 (8): e2533772123
- **The interplay of future emissions and geophysical uncertainties for projections of sea-level rise** *Nature Climate Change*
Darnell, C., Rennels, L., Errickson, F., Wong, T. E., Srikrishnan, V.
2025
- **The Social Costs of Hydrofluorocarbons and the Large Climate Benefits from their Expedited Phasedown.** *Nature climate change*
Tan, T., Rennels, L., Parthum, B.
2024; 14: 55-60
- **Equity weighting increases the social cost of carbon** *Science*
Prest, B. C., Rennels, L. F., Errickson, F., Anthoff, D.

2024; 385 (6710): 715-717

- **How Domain Experts Use an Embedded DSL** *PROCEEDINGS OF THE ACM ON PROGRAMMING LANGUAGES-PACMPL*
Rennels, L., Chasins, S. E.
2023; 7 (OOPSLA)
- **Sea Level and Socioeconomic Uncertainty Drives High-End Coastal Adaptation Costs.** *Earth's future*
Wong, T. E., Ledna, C., Rennels, L., Sheets, H., Errickson, F. C., Diaz, D., Anthoff, D.
2022; 10 (12): e2022EF003061
- **Comprehensive evidence implies a higher social cost of CO2.** *Nature*
Rennert, K., Errickson, F., Prest, B. C., Rennels, L., Newell, R. G., Pizer, W., Kingdon, C., Wingenroth, J., Cooke, R., Parthum, B., Smith, D., Cromar, K., Diaz, et al
2022; 610 (7933): 687-692
- **MimiBRICK.jl: A Julia package for the BRICK model for sea-level change in the Mimi integrated modeling framework** *Journal of Open Source Software*
Wong, T. E., Rennels, L. F., Errickson, F., Srikrishnan, V., Bakker, A., Keller, K., Anthoff, D.
2022; 7 (76)
- **The Social Cost of Carbon: Advances in Long-Term Probabilistic Projections of Population, GDP, Emissions, and Discount Rates** *BROOKINGS PAPERS ON ECONOMIC ACTIVITY*
Rennert, K., Prest, B. C., Pizer, W. A., Newell, R. G., Anthoff, D., Kingdon, C., Rennels, L., Cooke, R., Raftery, A. E., Sevcikova, H., Errickson, F.
2021: 223-305
- **Projecting future costs to U.S. electric utility customers from power interruptions.** *Energy (Oxford, England)*
Larsen, P. H., Boehlert, B., Eto, J., Hamachi-LaCommare, K., Martinich, J., Rennels, L.
2018; 147: 1256-1277
- **Climate Change Impacts on Harmful Algal Blooms in U.S. Freshwaters: A Screening-Level Assessment.** *Environmental science & technology*
Chapra, S. C., Boehlert, B., Fant, C., Bierman, V. J., Henderson, J., Mills, D., Mas, D. M., Rennels, L., Jantarasami, L., Martinich, J., Strzepek, K. M., Paerl, H. W.
2017; 51 (16): 8933-8943
- **Estimating wildfire response costs in Alaska's changing climate** *CLIMATIC CHANGE*
Melvin, A. M., Murray, J., Boehlert, B., Martinich, J. A., Rennels, L., Rupp, T.
2017; 141 (4): 783-795
- **Climate Change Impacts on US Water Quality Using Two Models: HAWQS and US Basins** *WATER*
Fant, C., Srinivasan, R., Boehlert, B., Rennels, L., Chapra, S. C., Strzepek, K. M., Corona, J., Allen, A., Martinich, J.
2017; 9 (2)
- **Climate change damages to Alaska public infrastructure and the economics of proactive adaptation.** *Proceedings of the National Academy of Sciences of the United States of America*
Melvin, A. M., Larsen, P., Boehlert, B., Neumann, J. E., Chinowsky, P., Espinet, X., Martinich, J., Baumann, M. S., Rennels, L., Bothner, A., Nicolisky, D. J., Marchenko, S. S.
2017; 114 (2): E122-E131