

# Sandy Sum

PH.D. CANDIDATE · ECONOMICS & ENVIRONMENTAL SCIENCE

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## Education

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### UC Santa Barbara (UCSB)

PH.D. ECONOMICS & ENVIRONMENTAL SCIENCE

2019 - present

- Committee: Tamma Carleton (Chair), Chris Costello, Olivier Deschênes, Kyle Meng

### UC Santa Barbara

M.A., ECONOMICS

2015-2016

### National University of Singapore

B.A., ECONOMICS

2009 - 2013

### Utrecht University

VISITING STUDENT, ECONOMICS DEPARTMENT

2012

## Research Positions

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- 2024 **Graduate Student Researcher**, Green Water Economics, UCSB emLab (PI: Tamma Carleton & Ram Fishman)
- 2023-2024 **Graduate Associate**, UCSB Broom Center for Demography
- 2020-2021 **Graduate Student Researcher**, California EPA Carbon Neutrality Study, UCSB emLab
- 2016-2019 **Research Analyst**, Quantifying Sustainable Development, UC Berkeley Global Policy Lab (PI: Solomon Hsiang)
- 2015-2016 **Ecological Data Intern**, National Center for Ecological Analysis and Synthesis

## Working Papers

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**Sum, S.** “Distributional Implications of Environmental Markets: Insights from California Groundwater”  
(Job market paper)

Proctor, J., Carleton, T., and **Sum, S.** “Parameter recovery with remotely sensed variables” (under review)  
(equal authorship; order randomized)

## Publications

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**Sum, S.** “Impact of Droughts on Served Drinking Water Disparities in California, 2007–2020.” *Am. J. Public Health*, August 2024.

Deshmukh, R., Weber, P., Deschenes, O., Hernandez-Cortes, D., Kordell, T., Mallow, C., Magin, T., Meng, M., **Sum, S.**, Thivierge, V., Uppal, A., Lea, D., & Meng, K. “Well setbacks limit California’s oil supply with larger health benefits and employment losses than excise and carbon taxes” *Nature Energy*. Policy Brief, June 2023.

Deshmukh, R., Weber, P., Deschenes, O., Hernandez-Cortes, D., Kordell, T., Mallow, C., Magin, T., Meng, M., **Sum, S.**, Thivierge, V., Uppal, A. & Meng, K. “Equitable low-carbon transition pathways for California’s oil extraction” *Nature Energy*, May 2023.

## Policy Reports

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“Enhancing equity while eliminating emissions in California’s supply of transportation fuels”  
Commissioned report for California EPA with emLab, 2021

## Awards, Fellowships, & Grants

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- 2024 **Graduate Summer Research Fellowship**, Property & Environmental Research Center (PERC)
- 2023 **Bren Summer Research Fellowship**, UCSB Bren School
- 2022 **California Coastal Regional Equity Research Award**, UCSB Blum Center  
**H. William Kuni Research Award**, (with Anna Boser) UCSB Bren School  
**Berkeley Summer School in Environmental and Energy Economics**  
**Diversity Fellow**, UC Berkeley & Sloan Foundation  
**Bren Summer Research Fellowship**, UCSB Bren School  
**Travel Grant (x3)**, UCSB Bren School & Graduate Student Association
- 2021 **Graduate Summer Fellowship Grant**, California Policy Lab  
**Bren PhD student grant for equity research**, UCSB Bren School

## Presentations

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- September 2024. Environmental & Resource Economics Workshop at CU Boulder
- August 2024. Water Markets for Conservation Workshop, Property & Environment Research Center
- June 2024. Summer Seminar Series, Property & Environment Research Center
- May 2024. Summer Conference, Association of Environmental and Resource Economists
- April 2024. Interdisciplinary PhD Workshop on Sustainable Development at Columbia University
- October 2023. Engaging The World panel on Health Equity at Chapman University
- 2021 & 2023. The Bren School PhD Research Symposium
- April 2023. The Occasional Workshop in Environmental and Resource Economics at UCSB
- October 2022. The Workshop in Environmental Economics and Data Science at the University of Oregon
- September 2022. Social Cost of Water Pollution Workshop at Cornell Atkinson Center for Sustainability & US EPA
- August 2022. Berkeley/Sloan Summer School in Environmental and Energy Economics
- April 2022. Interdisciplinary PhD Workshop on Sustainable Development at Columbia University
- May 2022. Annual Environmental Justice Symposium at the Bren School

## Teaching Experience

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Teaching Assistant, University of California, Santa Barbara

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| Winter & Spring<br>2024 | <b>Master's Capstone Project Course (EDS 411A)</b> , Prof. Carmen Galaz García                          |
| Spring 2022 & 2023      | <b>Economics of Environmental Management (ESM 204)</b> , Profs. Christopher Costello and Tamma Carleton |
| Fall 2022 & 2023        | <b>Statistics for Environmental Data Science (EDS 222)</b> , Prof. Tamma Carleton                       |
| Winter 2021             | <b>Environmental Economics (ECON 115)</b> , Prof. Kyle Meng   |

Student Q&A respondent

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| November 2023 | <b>BREAD-IGC Virtual PhD Course on Environmental Economics</b> , Prof. Tamma Carleton |
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## Professional Activities

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2023	<b>Bren School Masters in Environmental Data Science Lecturer Search Committee</b> , Student Representative
2022-present	<b>Economics and Environmental Science Student Group</b> , Student Representative
2021-2022	<b>The Bren School PhD Research Symposium</b> , Committee Member