CONTACT 1.970.219.5999 Mail Code 1809T

INFORMATION parthum.bryan@epa.gov 1200 Pennsylvania Avenue, N.W.

bryanparthum.com Washington, DC 20004

Citizenship: USA

Positions U.S. Environmental Protection Agency 2020 - present

Senior Economist

National Center for Environmental Economics

Washington, D.C.

Executive Office of the President of the United States 2023 - present

Senior Economist

Climate, Energy, Environment, and Science Branch (detail)

Washington, D.C.

Previous positions

Georgetown University - Adjunct Professor of Economics 2022-2023 Salisbury University - Adjunct Professor of Economics 2021-2022

EDUCATION Ph.D., Economics 2020

University of Illinois at Urbana-Champaign, IL

Dissertation: Estimating Demand for Environmental Amenities, Now and Later

M.S., Economics 2015

University of Illinois at Urbana-Champaign, IL

Thesis: Divesting from the Golden State: A Case Study of Local Foods Systems Using Propensity Score Matching Within Panel Data

B.S., Economics 2013

Colorado State University, Fort Collins, CO

 ${\it Thesis:} \ {\it Co-integration of Industry to Estimate Business Cycles, Developing}$

Employment and Revenue Projections for the State of Colorado

FIELDS Climate Economics Environmental Policy

Environmental and Resource Franchisc Applied Econometrics

Environmental and Resource Economics Applied Econometrics

REFEREED
JOURNAL
PUBLICATIONS

1. The social costs of hydrofluorocarbons and the large climate benefits from their expedited phaseout with Tammy Tan and Lisa Rennels. 2024.

Nature Climate Change. (ungated here)

- 2. Factors influencing customer participation in a program to replace lead pipes for drinking water with Heather Klemick, Ann Wolverton, Kristin Epstein, Sandra Kuting, and Sarah Armstrong. 2024. *Journal of Environmental and Resource Economics*. (ungated here)
- 3. Advancing the estimation of future climate impacts within the United States with Corinne Hartin, Erin E. McDuffie, Karen Noiva, Marcus Sarofim, Jeremy Martinich, Sarah Barr, Jim Neumann, Jaqueline Willwerth, and Allen Fawcett. 2023. Earth System Dynamics.
- 4. Comprehensive evidence implies a higher social cost of carbon with Kevin Rennert, Frank Errickson, Brian Prest, Lisa Rennels, Richard Newell, William Pizer, Cora Kingdon, Jordan Wingenroth, Roger Cooke, David Smith, Kevin Cromar, Delavane Diaz, Fran Moore, Ulrich Mller, Richard Plevin, Adrian Raftery, Hana evkov, Hannah Sheets, James Stock, Tammy Tan, Mark Watson, Tony Wong, and David Anthoff. 2022. Nature.

- 5. A market for snow: modeling winter recreation patterns under current and future climate with Peter Christensen. 2022. *Journal of Environmental Economics and Management.* (ungated here)
- 6. Overlooked benefits of nutrient reductions in the Mississippi river basin with Amy Ando. 2020. *Land Economics*. (ungated here)
- 7. Willingness-to-volunteer and stability of preferences between cities: Estimating the benefits of stormwater management with Ando et al. 2020. Journal of Environmental Economics and Management. (ungated here)
- 8. Benefits of the fire mitigation ecosystem service in The Great Dismal Swamp National Wildlife Refuge with Emily Pindilli and Dianna Hogan. 2017. Journal of Environmental Management. (ungated here)

FEDERAL, REGULATORY, AND OTHER GOVERNMENT PUBLICATIONS

The Social Cost of Greenhouse Gases

- 1. Estimates Incorporating Recent Scientific Advances. 2023
- 2. Interim Estimates under Executive Order 13990. 2021.

Natural Capital Accounting

1. National Strategy to Develop Statistics for Environmental-Economic Decisions: A U.S. System of Natural Capital Accounting and Associated Environmental Statistics. 2023

Federal Budget Chapters (Executive Office of the President)

- 1. Analysis of Federal Climate Financial Risk Exposure. 2024
- 2. Climate Financial Risk: The Federal Government's Budget Exposure to Financial Risk Due to Climate Change. 2024.

Phasing Down Production and Consumption of Hydrofluorocarbons

- 1. 2024 and beyond Allowance Allocation Rule. 2023.
- 2. Protection of Stratospheric Ozone Rule. 2021.
- 3. Framework Rule. 2021.

Papers in Preparation

- 1. Measuring the social cost of greenhouse gas emissions: Progress and a path forward with Elizabeth Kopits, Wade Davis, Charles Griffiths, Alex Marten, Al McGartland, David Smith, and Elizabeth Spink
- 2. Climate benefits of nutrient management in aquatic ecosystems with Jake Beaulieu, Elizabeth Kopits, and Chris Moore
- 3. Extreme precipitation and drinking water quality with Wes Austin and Siyu Pan
- 4. The circular economy of biosolids and its effect on drinking water quality with Patrick Walsh and Wes Austin
- 5. A recreation demand model for mountain snowpack

6. Wildfires degrade surface water quality and ecosystem services with David Smith

7. Buying the farm and the distribution of local and cultural benefits from farmland conservation with Amy Ando, Corey Lang, and Frederick Nyanzu

FEDERAL COMMITTEES, WORKGROUPS	Assessments of Federal Financial Climate Risk	2023-present
	Natural Capital Accounts and Environmental-Economic Statistics Policy Working Group Council of Account Leads Environmental-Economic Accounting Classifications	2022-present
	Ukraine Working Group on the Environment Ecosystem Services and Environmental Degradation	2022-present
	Interagency Working Group on the Social Cost of Greenhouse Gases Damage Functions, Discounting, Socioeconomic and Emissions Scena	2021-present
	American Innovation and Manufacturing Act Workgroups Hydrofluorocarbons Phasedown, Technology Transitions, Allowance	2021-present Allocation
	Federal Efforts to Address Harmful Algal Blooms and Hypoxia Government Accountability Office	2020-2022
Awards	Trudy A. Speciner Award for Advancing Environmental Protection U.S. EPA, National Honors Award	2023
	Gold Medal for Exceptional Service U.S. EPA, National Honors Team Award	2023
	Bronze Medal for Commendable Service U.S. EPA, Office of Atmospheric Protection	2023
	Cross-Cutting Group Award Executive Office of the President of the United States, OMB	2022
	Rising Star Honors Award U.S. EPA, Office of the Administrator	2022
	Most Outstanding Dissertation Award University of Illinois, Department of ACE	2021
	Louis V. Logeman Teaching Award University of Illinois, College of ACES	2020
TEACHING EXPERIENCE	Environmental Economics Georgetown University, DC (Econ 475) Lecture: 40 students	FA22
	Undergraduate Credit: 3 Hours Salisbury University, MD (ENVS 210) Online: 40 students	SP21
	Undergraduate Credit: 3 Hours Intermediate Microeconomics (ACE 398)	SP19, FA19
		,

University of Illinois at Urbana-Champaign, IL

Lecture: 65 students

Undergraduate Credit: 3 Hours Teaching Evaluation Scores: 4.9/5

Microcomputer Applications (ACE 161)

SP18, SU18, FA18

University of Illinois at Urbana-Champaign, IL *Lecture*: 50 students, *Online*: 100 students

Undergraduate Credit: 3 Hours Teaching Evaluation Scores: 4.8/5 Graduate Academy for College Teaching

SP19, FA19, SP20

University of Illinois at Urbana-Champaign, IL

Teaching Teachers how to Teach

Reviewer

Proceedings of the National Academy of Sciences — Nature Climate Change — Journal of Environmental Economics and Management — American Journal of Agricultural Economics — Land Economics — Environmental and Resource Economics — Resource and Energy Economics — Food Policy — Regional Science and Urban Economics — Landscape and Urban Planning — Land Use Policy — Ecological Economics — International Journal of Biometeorology

Additional Experience

Department of the Interior, U.S. Geological Survey

2015 - 2020

Economist: GS-0199-09

Reston, VA

Supervisor: Emily Pindilli

Inform adaptive management decisions within the U.S. interior and abroad

through interdisciplinary and interagency collaboration.

Parthum Construction

2005 - present

Owner and Founder

Fraser, CO

Design and build high-end residential remodels, manage large budgets

(\$50k-\$1mil), supervise employees and all sub-contractors.

References Available upon request.

Programming

• R, STata, julia, • git, • MATLAB, • python, • ArcGIS, LATEX, • Office

Languages

• English (native), American Sign Language (conversational)