Bryan Parthum
Curriculum Vitae

CONTACT INFORMATION	1.970.219.5999 parthum.bryan@epa.gov bryanparthum.com Citizenship: USA	Mail Code 1809T 1200 Pennsylvania Avenue, N.W. Washington, DC 20004

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
  Thesis: *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 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 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 Scenarios	2021-present
	American Innovation and Manufacturing Act Workgroups Hydrofluorocarbons Phasedown, Technology Transitions, Allowance Allocation	2021-present
	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
	        Undergraduate Credit: 3 Hours
		FA22

	Salisbury University, MD (ENVS 210)
	        Online: 40 students
	        Undergraduate Credit: 3 Hours
		SP21

	Intermediate Microeconomics (ACE 398)
	    University of Illinois at Urbana-Champaign, IL
	        Lecture: 65 students
	        Undergraduate Credit: 3 Hours
	        Teaching Evaluation Scores: 4.9/5
		SP19, FA19

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)