

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	<p>U.S. Environmental Protection Agency Senior Economist: GS-0110-14 National Center for Environmental Economics Washington, D.C.</p> <p>Executive Office of the President of the United States Senior Economist Climate, Energy, Environment, and Science (detail) Washington, D.C.</p> <p>Previous positions Georgetown University — Adjunct Professor Salisbury University — Adjunct Professor</p>	<p>2020 - <i>present</i></p> <p>2023 - <i>present</i></p> <p>2022-2023 2021-2022</p>
EDUCATION	<p>Ph.D., Economics University of Illinois at Urbana-Champaign, IL Dissertation: <i>Estimating Demand for Environmental Amenities, Now and Later</i></p> <p>M.S., Economics University of Illinois at Urbana-Champaign, IL Thesis: <i>Divesting from the Golden State: A Case Study of Local Foods Systems Using Propensity Score Matching Within Panel Data</i></p> <p>B.S., Economics Colorado State University, Fort Collins, CO Thesis: <i>Co-integration of Industry to Estimate Business Cycles, Developing Employment and Revenue Projections for the State of Colorado</i></p>	<p>2020</p> <p>2015</p> <p>2013</p>
FIELDS	Climate Economics Environmental and Resource Economics	Environmental Policy Applied Econometrics
REFEREED JOURNAL PUBLICATIONS	<ol style="list-style-type: none"> <li><b>The social costs of hydrofluorocarbons and the large climate benefits from their expedited phaseout</b> with Tammy Tan and Lisa Rennels. 2024. <i>Nature Climate Change</i>.</li> <li><b>Advancing the estimation of future climate impacts within the United States</b> with Corinne Hartin, Erin E. McDuffie, Karen Noiva, Marcus Sarofim, Jeremy Martinich, Sarah Barr, Jim Neumann, Jaqueline Willwerth, and Allen Fawcett. 2023. <i>Earth System Dynamics</i>.</li> <li><b>Comprehensive evidence implies a higher social cost of carbon</b> 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. <i>Nature</i>.</li> <li><b>A market for snow: Modeling winter recreation patterns under current and future climate</b> with Peter Christensen. 2022. <i>Journal of Environmental Economics and Management</i>. (ungated here)</li> </ol>	

5. **Overlooked benefits of nutrient reductions in the Mississippi river basin** with Amy W. Ando. 2020. *Land Economics*. (ungated here)
6. **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)
7. **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)

REGULATORY  
PUBLICATIONS**The Social Cost of Greenhouse Gases**

1. The Social Cost of Greenhouse Gases: Estimates Incorporating Recent Scientific Advances — Model development, replication, and full text
2. Interim Estimates under Executive Order 13990 — Replication code and full text

**Phasing Down Production and Consumption of Hydrofluorocarbons**

1. 2021 Framework Rule — Chapter 4: The Social Cost of Hydrofluorocarbons; Chapter 6: Environmental Justice; Chapter 8: Uncertainty Surrounding the Social Costs of Hydrofluorocarbons
2. 2024 Allowance Allocation Rule — Chapter 2: The Benefits and Costs of the HFC Phasedown; Chapter 4: Climate Benefits; Chapter 6: Environmental Justice
3. Protection of Stratospheric Ozone Rule — Chapter 4: Benefits, The Social Cost of Hydrofluorocarbons; Chapter 6: Environmental Justice Analysis

PAPERS IN  
PREPARATION










1. **Factors influencing participation in lead service line replacement programs** (*under review*) with Heather Klemick and Ann Wolverton
2. **A recreation demand model for mountain snowpack**
3. **Climate benefits of nutrient management in aquatic ecosystems** with Jake Beaulieu, Elizabeth Kopits, and Chris Moore
4. **Extreme precipitation and drinking water quality** with Wes Austin and Siyu Pan
5. **Wildfires degrade surface water quality and ecosystem services** with David Smith
6. **The circular economy of biosolids and its effect on drinking water quality** with Patrick Walsh and Wes Austin
7. **Buying the farm and the distribution of local and cultural benefits from farmland conservation** with Amy W. 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	Gold Medal for Exceptional Service U.S. EPA, National Honors Team Award	2023
	Trudy A. Speciner Award for Advancing Environmental Protection U.S. EPA, National Honors Award	2023
	Cross-Cutting Group Award Executive Office of the President, 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) <i>Lecture</i> : 40 students Undergraduate Credit: 3 Hours	FA22
	Salisbury University, MD (ENVS 210) <i>Online</i> : 40 students Undergraduate Credit: 3 Hours	SP21
	Intermediate Microeconomics (ACE 398) University of Illinois at Urbana-Champaign, IL <i>Lecture</i> : 65 students Undergraduate Credit: 3 Hours Teaching Evaluation Scores: 4.9/5	SP19, FA19
	Microcomputer Applications (ACE 161) University of Illinois at Urbana-Champaign, IL <i>Lecture</i> : 50 students, <i>Online</i> : 100 students Undergraduate Credit: 3 Hours Teaching Evaluation Scores: 4.8/5	SP18, SU18, FA18
	Graduate Academy for College Teaching University of Illinois at Urbana-Champaign, IL Teaching Teachers how to Teach	SP19, FA19, SP20

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 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.	2015 - 2020
	Parthum Construction Owner and Founder Fraser, CO Design and build high-end residential remodels, manage large budgets (\$50k-\$1mil), supervise employees and all sub-contractors.	2005 - <i>present</i>
REFERENCES	Available upon request.	
PROGRAMMING	•  <b>R</b> ,  <b>STATA</b> ,  <b>julia</b> ,  <b>git</b> ,  <b>MATLAB</b> ,  <b>python</b> ,  <b>ArcGIS</b> ,  <b>L<sup>A</sup>T<sub>E</sub>X</b> ,  <b>Office</b>	
LANGUAGES	• English (native), American Sign Language (conversational)	