

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 Economist: GS-0110-14 National Center for Environmental Economics Washington, D.C. Office of Management and Budget Climate, Energy, Environment, and Science (detail) Climate-Related Financial Risk and E.O. 14030 Washington, D.C. Previous positions Georgetown University — Adjunct Professor Salisbury University — Adjunct Professor	2020 - <i>present</i> 2023 - <i>present</i> 2022-2023 2021-2022
EDUCATION	Ph.D., Economics University of Illinois at Urbana-Champaign, IL Dissertation: <i>Estimating Demand for Environmental Amenities, Now and Later</i> 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> 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>	2020 2015 2013
FIELDS	Environmental and Resource Economics Applied Econometrics	Environmental Policy Climate Change
REFEREED JOURNAL PUBLICATIONS	<ol style="list-style-type: none"> The social costs of hydrofluorocarbons and the large climate benefits from their expedited phaseout with Tammy Tan and Lisa Rennels. 2024. <i>Nature Climate Change</i>. 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. <i>Earth System Dynamics</i>. 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. <i>Nature</i>. A market for snow: Modeling winter recreation patterns under current and future climate with Peter Christensen. 2022. <i>Journal of Environmental Economics and Management</i>. (ungated here) 	

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	2022-present
	Policy Working Group	
	Council of Account Leads	
	Environmental-Economic Accounting Classifications	
	Ukraine Working Group on the Environment	2022-present
	Ecosystem Services and Environmental Degradation	
	Interagency Working Group on the Social Cost of Greenhouse Gases	2021-present
	Damage Functions, Discounting, Socioeconomic and Emissions Scenarios	
	American Innovation and Manufacturing Act Workgroups	2021-present
	Hydrofluorocarbons Phasedown, Technology Transitions, Allowance Allocation	
	Federal Efforts to Address Harmful Algal Blooms and Hypoxia	2020-2022
	Government Accountability Office	
AWARDS	Gold Medal for Exceptional Service	2023
	U.S. EPA, National Honors Team Award	
	Trudy A. Speciner Award for Advancing Environmental Protection	2023
	U.S. EPA, National Honors Award	
	Cross-Cutting Group Award	2022
	Executive Office of the President, OMB	
	Rising Star Honors Award	2022
	U.S. EPA, Office of the Administrator	
	Most Outstanding Dissertation Award	2021
	University of Illinois, Department of ACE	
	Louis V. Logeman Teaching Award	2020
	University of Illinois, College of ACES	
TEACHING EXPERIENCE	Environmental Economics	
	Georgetown University, DC (Econ 475)	FA22
	<i>Lecture:</i> 40 students	
	Undergraduate Credit: 3 Hours	
	Salisbury University, MD (ENVS 210)	SP21
	<i>Online:</i> 40 students	
	Undergraduate Credit: 3 Hours	
	Intermediate Microeconomics (ACE 398)	SP19, FA19
	University of Illinois at Urbana-Champaign, IL	
	<i>Lecture:</i> 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	
	<i>Lecture:</i> 50 students, <i>Online:</i> 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 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	•  R ,  STATA ,  julia ,  git ,  MATLAB ,  python ,  ArcGIS ,  L^AT_EX ,  Office	
LANGUAGES	• English (native), American Sign Language (conversational)	