

Graham Diedrich

Ph.D. in Political Science & Public Policy Student,
University of Michigan
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Education

Doctor of Philosophy in Political Science & Public Policy Aug 2025 – May 2031
Department of Political Science,
Gerald R. Ford School of Public Policy,
University of Michigan, Ann Arbor, MI

- ICPSR Summer Program, 2025

Master of Science in Data Science Aug 2023 – May 2025
Department of Statistics and Probability,
Michigan State University, East Lansing, MI

- Graduate Certificate: Environmental and Social Systems Modeling
- Graduate Certificate: Community Engagement

Master of Public Policy Aug 2021 – May 2023
Department of Political Science, Department of Economics,
Michigan State University, East Lansing, MI

- Graduate Specialization: Environmental Science and Policy
- Graduate Certificate: College Teaching

Bachelor of Arts in International Relations Aug 2019 – Aug 2021
James Madison College,
Michigan State University, East Lansing, MI

- Focus Area: International Environmental Law

Research Experience

DOE Energy Innovator Fellow Aug 2025 – Present
Sustainable Development Institute,
College of Menominee Nation, Keshena, WI

- Leading the development of a campus-wide energy strategic plan to enhance energy efficiency, reduce operational costs, and improve grid resilience

Margaret A. Davidson Graduate Fellow Aug 2024 – Present
Wells National Estuarine Research Reserve,
National Oceanic and Atmospheric Administration, Wells, ME

- Developing an information flow and prioritization model to analyze how 11 local governments, state and federal agencies, and non-profits in southern Maine integrate reserve science to enhance coastal resilience decision-making
- Creating a stakeholder engagement database of 340 contacts to support upcoming focus groups, and semi-structured interviews, and surveys
- Planning participatory modeling sessions to facilitate collaborative decision-making and incorporate diverse stakeholder perspectives into the prioritization process
- Analyzing data from stakeholder engagement to refine the model, ensuring it aligns with local needs and scientific recommendations for coastal resilience

Community and Environment Fellow

Apr 2024 – Present

Virginia Working Landscapes,
Smithsonian Conservation Biology Institute, Washington, DC

- Designed and distributed a statewide representative mail survey to 3,050 Virginia farmers, using data to construct belief profiles using latent class analysis
- Developing empirical models to predict the onset of wind and solar restrictions across U.S. counties, with the goal of studying local-level policy diffusion

DOE Scholars Fellow

Jun 2024 – Aug 2024

Office of Clean Energy Demonstrations,
U.S. Department of Energy, Washington, DC

- Created maps utilized to supported negotiations for community benefit plans (CBPs) for 33 industrial demonstrations projects across the U.S.
- Examined ongoing CBP proposals influencing workforce development and funding allocations to determine diverging trends by industry type

Graduate Research Assistant

Oct 2021 – May 2024

Forest Carbon and Climate Program,
Michigan State University, East Lansing, MI

- Developed and led a state policy-tracking initiative with \$50,000 in support from the Environmental Defense Fund
 - Created conceptual framework grouping policies into key areas
 - Systematically reviewed statutory laws, administrative rulings, regulations, and program websites
 - Built a 70-column database and maps for 50 states
 - Produced 8 white papers and a peer-reviewed publication (in progress)
- Led a \$12,000 analysis on the relationship between voluntary carbon markets and preferential tax programs in 9 states
 - Conducted 35 qualitative interviews
 - Delivered a 68-page report synthesizing qualitative interview and policy analysis findings
 - Findings shaped understanding of constraints on forest-carbon offset projects
- Collaborated with American Forests, NIACS, and Canadian Forest Service Carbon Accounting Team to write R code integrating ecosystem model results into harvested wood products (HWP) simulations

Catalyst Leadership Circle Fellow

May 2023 – Aug 2023

Graham Sustainability Institute,
University of Michigan, Ann Arbor, MI

- Developed 2 community-guided greenhouse gas inventories for Grand Haven, MI and Rockford, MI
 - Led a team of 5 planning staff to gather sector-level emissions data (electricity, transportation, water, waste, etc.)
 - Coordinated with utilities, municipal departments, water facilities, and waste management companies
 - Modeled emissions for calendar year 2022 using ICLEI ClearPath and EPA GHG Tool in accordance with the Greenhouse Gas Protocol
- Published 2 individualized emissions reports to support cities' initial sustainability planning
 - Presented findings to the public and city councils with emphasis on decarbonization and environmental justice

Teaching, Advising, & Engagement

Bailey Scholars Program Graduate Fellow

Apr 2024 – May 2025

College of Agriculture and Natural Resources
Michigan State University, East Lansing, MI

- Co-facilitating 2 undergraduate courses, ANR 210 and ANR 310, through dialogue and discussion
- Providing feedback on 4 multimodal assignments to 15 students, instructing them in self-reflection, peer-review practices, and collaborative learning

Graduate Coordinator & Consultant

Jan 2023 – May 2025

The Writing Center @ MSU, East Lansing, MI

- Conducting in-person and virtual writing consultations and collaborating with clients to enhance their writing skills and address specific concerns
- Offering generative feedback, support, and resources aligned with Writing Center pedagogy, fostering an environment that encourages continuous improvement in writing proficiency
- Individualized writing support to 100–200 undergraduate and graduate students, leading to greater confidence in written communication
- Event planning and advisory support for 15–20 undergraduate consultants, resulting in increased engagement and professional development opportunities for staff

Public Policy Learning Assistant

Jan 2022 – May 2023

Department of Political Science,
Michigan State University, East Lansing, MI

- Graded assignments and provided lectures on environmental policy for 4 undergraduate sections, PLS 422 and PLS 494, as part of the Michigan Government Semester Program
- Improved student comprehension of environmental legislation by 14% compared to pre-testing levels

Publications

Peer-Reviewed Publications

Diedrich, G. & Clay, K. (2025). Navigating dual enrollment: Assessing compatibility between improved management carbon offset projects and preferential property tax programs across nine states. *Journal of Sustainable Forestry*, 1–24. <https://doi.org/10.1080/10549811.2025.2527756>

Diedrich, G. (2024). Evaluating local climate policy: Municipal action plans through the lens of resilience and environmental justice. *PLOS Climate* 3 (1): e0000395. <https://doi.org/10.1371/journal.pclm.0000395>.

Policy Reports & White Papers

Diedrich, G. (2024). Evaluating Community Benefits: Trends in Job Creation and Funding Metrics for the Industrial Demonstrations Program. Office of Clean Energy Demonstrations, U.S. Department of Energy. Washington, D.C. https://www.grahamdiedrich.com/_files/ugd/e8d0f3_d001e4c0a29d4964bfadcc6783ba26fe.pdf.

Kreye, M., Clay, K., Chizmar, S., Cooper, L., Diedrich, G., Gadoth-Goodman, D., Parajuli, R., Sutton, A. (2023). Forest Carbon Market Structures and Mechanism. Forest Owner Carbon and Climate Education Program. East State College, PA. <https://extension.psu.edu/forest-carbon-market-structures-and-mechanism>

Diedrich, G. (2023). From Data to Action: Harnessing GHG Inventories for Local Sustainability Initiatives. U-M Graham Sustainability Institute. Ann Arbor, MI. <https://graham.umich.edu/media/files/CLCF-2023-Diedrich-Report.pdf>.

Diedrich, G. (2023). Embodied Carbon Policies. MSU Forest Carbon and Climate Program. East Lansing, MI. <https://www.canr.msu.edu/resources/embodied-carbon-policies>.

Diedrich, G. (2023). State Forest Certification. MSU Forest Carbon and Climate Program. East Lansing, MI. <https://www.canr.msu.edu/resources/state-forest-certification>.

Diedrich, G. (2023). State Cap-and-Trade Programs. MSU Forest Carbon and Climate Program. East Lansing, MI. <https://www.canr.msu.edu/resources/state-cap-and-trade-programs>.

Diedrich, G. (2023). State-Level Forest BMPs. MSU Forest Carbon and Climate Program. East Lansing, MI. <https://www.canr.msu.edu/resources/state-level-forest-bmps>.

Diedrich, G. (2023). Who's Paying the Price? The Legacy of the Part 201 Program in Michigan. East Lansing, MI. https://www.grahamdiedrich.com/_files/ugd/e8d0f3_5db37b22ac4942c1ae64f1954a795c74.pdf.

Diedrich, G. (2022). An Impact Evaluation Proposal: Oregon's 'Cap-and-Trade' Climate Protection Program. MSU Forest Carbon and Climate Program. East Lansing, MI. https://www.grahamdiedrich.com/_files/ugd/e8d0f3_0c0f1d476d614ba0934635f4118b2522.pdf.

Diedrich, G. (2022). How will the Inflation Reduction Act impact forest and carbon management? MSU Forest Carbon and Climate Program. East Lansing, MI. <https://www.canr.msu.edu/news/how-will-the-inflation-reduction-act-impact-forest-and-carbon-management>.

Diedrich, G. (2022). Carbon Pricing: Carbon Markets and Carbon Taxes. MSU Forest Carbon and Climate Program. East Lansing, MI. <https://www.canr.msu.edu/fccp/FCCP-ORL/Carbon%20Pricing%20-%20Carbon%20Markets%20and%20Carbon%20Taxes.pdf>.

Datasets

Diedrich, G. (2024). Underserved Farmers Index. Self-published. <https://www.grahamdiedrich.com/data/ufi>.

Conference Presentations

Diedrich, G. (2025). Information ecosystems: exploring the connection between reserve science and coastal resilience decision-making. Presentation at the Coastal & Estuarine Research Federation Conference 2025 (November 12, 2025). Richmond, VA.

Diedrich, G. (2025). Information ecosystems: exploring the connection between reserve science and coastal resilience decision-making. Presentation at the Climate Change Education Solutions Network Conference 2025 (October 16, 2025). Grand Rapids, MI.

Ray, M., Van Loh, B., Callahan, M., Petty, D., Diedrich, G., Prior, S., Soltis, B. (2025). What AI Can't Replace: Building Community Through Care and Trust. Presentation at the Michigan State University Teaching and Learning Knowledge Sharing (TALKS) Conference (May 8, 2025). East Lansing, MI.

Diedrich, G., Johnson, A., Cooper, N. (2025). Shining Insights: Examining the Equity Implications of Renewable Energy Restrictions for Underserved Farmers. Presentation at the 2025 Midwest Climate Summit (May 1, 2025). Madison, WI.

Diedrich, G. (2024). Mapping the Disparities: A National Index of Historically Underserved Farmers Using PCA. Presentation at the 2024 Data Science Student Conference (November 15, 2024). East Lansing, MI.

Diedrich, G. (2024). The Race for Renewables: Modeling Renewable Energy Productivity Amid Local Siting Restrictions in Michigan. Presentation at the Michigan State University Environmental Science and Policy Program Fall Research Symposium (October 11, 2024). East Lansing, MI.

Diedrich, G. (2024). Charting Climate Confidence through Institutional Trust in European Governments.

Presentation at the 5th International European Social Survey Conference (July 8–10, 2024). Lisbon, Portugal.

Diedrich, G. (2023). Assessing the Interplay between State Climate Plans and the SDGs: A Case Study in the Great Lakes Region. Presentation at the Michigan State University Environmental Science and Policy Program Fall Research Symposium (October 27, 2023). East Lansing, MI.

Diedrich, G. (2023). Who's Paying the Price? The Legacy of the Part 201 Program in Michigan. Presentation at the 2023 Michigan Political Science Association Conference (October 20, 2023). Flint, MI.

Diedrich, G. (2023). Building Resilient Communities: The Intersection of Climate Change, Local Governance, and Environmental Justice. Presentation at the 2023 Engagement Scholarship Consortium International Conference (October 4–5, 2023). East Lansing, MI.

Diedrich, G. (2023). Advancing Environmental Justice in Local Government: A Path Towards Justice and Effective Policymaking. Presentation at the 2023 Michigan Environmental Justice Conference (June 21, 2023). Detroit, MI.

Diedrich, G. (2022). Forests as a Climate Solution: State Policy Tracking Initiative. Presentation at the Michigan State University Environmental Science and Policy Program Fall Research Symposium (October 16, 2022). East Lansing, MI.

Invited Presentations & Talks

“Equity in Local Climate Action Plans: A Just Solution for Michigan” Presentation for Michigan Climate Action Network. May 21, 2025.

Certifications & Trainings

Facilitative Leadership Training	Aug 2025
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Michigan State University Extension, East Lansing, MI

Topics: Large group facilitation, dialogue mapping, community and action research

Empirical Implications of Theoretical Models Certification	July 2025
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Empirical Implications of Theoretical Models Institute, Ann Arbor, MI

Topic: Time-series, panel, and longitudinal data analysis

ICPSR Summer Program	July 2025
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Inter-university Consortium for Political and Social Research, Ann Arbor, MI

Topics: Regression analysis, empirical modeling for social science, statistical machine learning

IPU Grid Power School	May 2025
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Institute of Public Utilities, East Lansing, MI

Topics: Demand-Side forecasting and efficiency, load management, policy evaluation

Graduate Certificate in Environmental and Social Systems Modeling	May 2025
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Michigan State University, East Lansing, MI

Topics: Environmental modeling, agent-based modeling, system dynamics modeling, participatory model-building, hierarchical linear modeling, and structural equation modeling

Graduate Certificate in Community Engagement	May 2025
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Michigan State University, East Lansing, MI

Topics: Foundations of community engaged scholarship, techniques for community engaged research, evaluation of community partnerships, communicating with publics

Graduate Certificate in College Teaching	Apr 2023
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Michigan State University, East Lansing, MI

Topics: Developing discipline-related teaching strategies, creating effective learning environments, assessing student success

Inclusive Teaching Certificate

Jan 2022

Columbia University, New York, NY

Topics: Inclusive course climate, setting explicit expectations, promoting diversity and inclusion, course accessibility, cultivating critical self-reflection

Technical Skills & Methods

Programming: Python, R, SQL, C; Libraries/Packages: NumPy, Pandas, Seaborn

Data & Analysis Software: ArcGIS, Stata, Jupyter Notebook, ICLEI ClearPath, Tableau, Low Emissions Analysis Platform (LEAP)

Methods: Time-series data analysis, classification algorithms (logistic regression, KNN, SVM); prediction algorithms (RandomForest, XGBoost), qualitative content analysis (inductive and deductive); survey design (online and mail); geo-spatial modeling

Fellowships, Grants, & Awards

Community Engagement Award

Mar 2025

Environmental Science and Policy Program, Michigan State University

Margaret A. Davidson Graduate Fellowship

Aug 2024

Office for Coastal Management, National Oceanic and Atmospheric Administration

DOE Scholars Program Fellowship

Jun 2024

Office of Clean Energy Demonstrations, U.S. Department of Energy

2024 NatSci Awesome Graduate Student Award

May 2024

College of Natural Science, Michigan State University

Life on a Sustainable Planet Community and Environment Fellowship

Apr 2024

Smithsonian Institution

Bailey Scholars Program Fellowship

Apr 2024

College of Agriculture and Natural Resources, Michigan State University

US Fulbright Scholars Research Award

Mar 2024

Institute of International Education

Competitive Student Research Grant

Mar 2024

Environmental Science and Policy Program, Michigan State University

Student Research Symposium Best Presentation Award (Runner-Up)

Dec 2023

Environmental Science and Policy Program, Michigan State University

National Science Foundation STEM Ambassador Program

Sep 2023

Outreach and Engagement Office, Michigan State University

MSU Cloud Computing Fellowship

Aug 2023

Institute for Cyber-Enabled Research, Michigan State University

Catalyst Leadership Circle Fellowship

May 2023

Graham Sustainability Institute, University of Michigan

Public Policy Learning Assistant Scholarship

Jan 2022, Jan 2023

Department of Political Science, Michigan State University

Tom Schneider Peace Award
Peace Education Center

May 2019

Community & University Service

Environmental Commissioner
Government of Meridian Township

Feb 2023 – Feb 2025

Student Committee Lead
ESPP Fall Research Symposium, Michigan State University

Aug 2023 – Oct 2023

Conference Reviewer
Engagement Scholarship Consortium

April 2023