

Danielle M. Wood

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Research Interests

Climate resilience and adaptation decision-support and planning, evaluation in complex environments, research translation processes, asset-based and sustainable development, community engagement and collective impact strategies.

Education

- Ph.D. Urban and Regional Planning, University of Wisconsin-Madison, 2012
Focus: development and use of decision-support data
Ph.D. Minor: Public Management and Evaluation, LaFollette School of Public Affairs
- M.S. Urban and Regional Planning, University of Wisconsin-Madison, 1996
Focus: land use and sustainability
- B.S. Landscape Architecture, Purdue University, 1992
Focus: environmental planning and sustainability

Appointments and Professional Experiences

2013-present University of Notre Dame

- 2024-present Associate Professor of the Practice, Environmental Change Initiative
- 2023-present Concurrent faculty, Keough School of Global Affairs
- 2022-present Concurrent faculty, Civil and Environmental Engineering and Earth Sciences
- 2021-present Faculty Affiliate, Lucy Family Institute for Data and Society
- 2019-present Program Director, ND-GAIN, Environmental Change Initiative
- 2018-2024 Associate Professor of the Practice, College of Engineering
- 2018-2023 Associate Director for Research, Center for Civic Innovation
- 2018-2019 Director of Community-Based Research and Impact, Center for Social Concerns
- 2013-2018 Assistant Professor of the Practice, Center for Social Concerns
- 2013-2018 Assistant Director of Community-Based Research and Impact, Center for Social Concerns

2006-2012 University of Wisconsin-Madison

- 2012 Research Fellow, Urban and Regional Planning
- 2007-2011 Doctoral Research Assistant, Environmental Resources Center, UW-Extension
- 2006 Doctoral Project Assistant, Morgridge Center

2003 CSIRO, NT, Australia

Limited-term Sustainability Project Officer

1998-2003 Groundswell Conservancy (formerly NHLT), Madison, WI

Executive Director

1998-2003 Department of Natural Resources, Madison, WI

Environmental Analyst

1993-1996 Camiros, Madison, WI (Chicago, IL)

Assistant Planner

Awards/Fellowships

- Rev. Edmund P. Joyce, C.S.C., Award for Excellence in Undergraduate Teaching, College of Engineering, University of Notre Dame (2022)
- Faculty Fellow, Center for Social Concerns, University of Notre Dame (2019-2022)
- Summer Research Training Fellow, Institute for Policy Research, Northwestern University (2012)
- Dissertation Excellence Fellowship, Department of Urban and Regional Planning, University of Wisconsin-Madison (2012)
- URPL Research Award, Department of Urban and Regional Planning, University of Wisconsin-Madison (2011)
- Vilas Research Award, The Graduate School, University of Wisconsin- Madison (2007)
- National Student Honor Award, American Society of Landscape Architecture, nominated by Purdue University (1992)
- Dean's Undergraduate Research Award, School of Agriculture, Purdue University (1992)

Academic Service

- UND Core Curriculum Committee, Integration Sub-committee (2018-current)
- UND Education, Research and Community Outreach Sustainability Working Group (2019-2023)

Teaching

- Designing Research for Grand Challenges (co-designed, co-taught)
- Introduction to Complex Problem-Solving in the Public Sphere (designed, co-taught)
- Introduction to Asset-Based Community Development (designed, taught)
- Introduction to Community-Based Research and GIS Data Collection (designed, co-taught)
- Human-Centered Design for Engineering (multiple guest lecturer)
- Poverty Studies capstone (guest lecturer, technical assistance)
- Advisor for multiple thesis and capstone projects, including iTREDS, Resiliency minor, American Studies, Design, Sustainability minor, etc.

Selected Grants

Federal Contract. PI on successful proposal for approximately \$785, 000 for Climate Adaptation: Identifying Interventions and Developing a Global Urban Climate Assessment (GUCA). (2023)

National Science Foundation-EAGER Germination of Research Questions for Addressing Critical Societal Challenges. Co-PI on successful proposal for approximately \$300,000 for the Immersive Training Studio for Technology-Environment-Energy-Water-Society (TEEWS) Grand Challenges aimed at training early STEM Ph.D.s. (2022)

Lucy Institute for Data and Society Grant. Co-PI on successful proposal for exploring air quality monitoring and regulatory environment for environmental justice. Salary for two graduate students. (2022)

Federal Contract. PI on successful proposal for approximately \$120, 000 exploring KPIs for adaptive capacity. (2022)

National Science Foundation-Improving Undergraduate STEM Education Collaborative Research. PI on successful proposal for approximately \$2.7 million (\$ 875,000 to Notre Dame) for a three-campus replication of the Community-Engaged Educational Ecosystem for DEI in STEM and regional workforce development. (2021)

Federal Contract. PI on successful proposal exploring metrics for approximately \$60,000 identifying drivers of volatility in ND-GAIN longitudinal data. (2021)

National Institute for Food and Agriculture. Co-PI on successful proposal for approximately \$1.7 million for research designing responsive food access leveraging sharing economy and recommender technology. (2020)

National Science Foundation-Harnessing the Data Revolution-Data Science Corps. Senior Personnel on successful proposal for approximately \$1.1 million for developing socially conscious data scientists and building a community-engaged data corps. (2019)

Indiana Campus Compact Grant. Successful proposal for over \$2,000 for Outcome Harvesting Community Impact to identify the range of outcomes from community-based learning efforts. (2018)

National Science Foundation-Smart and Connected Communities. Co-PI on successful proposal for nearly \$1.5 million for research examining error reduction in crowdsourcing water quality information, *Smart Water Crowdsensing*. (2018)

Elkhart Community Foundation. Co-PI on successful proposals for over \$250,000 to pilot and develop the replication of Educational Ecosystem in Elkhart Catalyst. (2018-2023)

Civic Switchboard. Successful proposal with Center for Digital Scholarship for \$3,000 to attend the Urban Institute National Neighborhood Indicators Partnership conference and Civic Switchboard workshop. (2017)

USDA Farm to School Grant. Evaluation component on grant for local Title 1 school. (2007)

National Science Foundation-Improving Undergraduate STEM Education. Co-PI on successful proposal for approximately \$275,000 for research on the pilot of an Educational Ecosystem for STEM and regional workforce development, *The Bowman Creek Educational Ecosystem*. (2016)

Indiana Campus Compact Grant. Successful proposal for \$3,000 for *Food for Thought* Community Engagement Breakfast Series to build community-based research networks for local issues. (2015)

Knowles-Nelson Stewardship Program Grant. State of Wisconsin. Successful proposal for approximately \$800,000 for NHLT Fish Lake acquisition. (2002)

Conservation Fund Program Grant. Dane County. Successful proposal for approximately \$200,000 for NHLT Fish Lake acquisition. (2001)

Peer-Reviewed Publications/Technical Documents

Underwood, A., Marcantoni, R., Wood, D., & Crippa, P. (in review). Interstate Air Pollution Governance in the United States: Exploring Clean Air Act Section 126. Environmental Management

Wood, D., Bona, M., Maramba, T., Nuncio, A. S., Hokoda, E., Kamil, S., Wanbaugh, B., Obonyo, N. (forthcoming). ND-GAIN Climate Adaptation Briefs. Environmental Change Initiative

Wood, D., Mustillo, T., Jimenez, E. P., Bona, M., Wanbaugh, B., & Farrae, M. (forthcoming). Identifying Constructs and Metrics for Adaptive Capacity: Lessons from the Literature and Guatemala, Honduras, Nicaragua, Colombia, and Haiti. Technical Report: Environmental Change Initiative

Wood, D., Marie, H., Aqlan, F., Brockman, J., Meyers, K. (2024, forthcoming). Replicating a Community-Engaged Educational Ecosystem: Examining Differences in Outcomes. In the proceedings from the American Society for Engineering Education.

Wood, D., Marie, H., Aqlan, F., Brockman, J., Meyers, K., Lapsley, D. (2023). Replicating a Community-Engaged Educational Ecosystem: First Year Findings. In the proceedings from the American Society for Engineering Education.

Dillahunt, T. R., Sawwan, M., Wood, D., Wimer, B. L., Conrado, A.-M., Eicher-Miller, H., & Metoyer, R. (2023). Understanding Food Planning Strategies of Food Insecure Populations: Implications for Food-Agentic Technologies. Paper presented at the ACM CHI Conference on Human Factors in Computing Systems, Hamburg, Germany.

Speir, S. L., Shang, L., Bolster, D., Tank, J. L., Stoffel, C. J., Wood, D. M., ... & Wang, D. (2021). Solutions to current challenges in widespread monitoring of groundwater quality via crowdsensing. *Ground Water*.

Wood, D., Gura, A., Brockman, J., Gilot, G. (June 2020). Critical Findings from the Bowman Creek Educational Ecosystem Pilot. In the proceedings from the American Society for Engineering Education.

Wood, D., Gura, A., Brockman, J., Rayna Carolan-Silva, A., Boukdad, S., & Alarcon, J. C. (2019). Informing Replication of the Bowman Creek Educational Ecosystem Pilot. In proceedings from the American Society for Engineering Education.

Wood, D., Gura, A., Brockman, J., & Alptekin, S. (2018). Student Outcomes in Academic Community Engaged STEM projects with Multi-Dimensional Diversity. In proceedings from the American Society for Engineering Education.

Wood, D. (2016). Community Indicators and Collective Impact: Facilitating Change, Community Development, 47(2) pp194-208.

Beckman, M. P., & Wood, D.M. (2016). The role of community-based research in achieving community impact. In Beckman, M. P., & Long, J. (Eds.) *When community matters: Effective teaching and practice of community-based research*. Sterling, VA: Stylus Publishing.

Genskow, K., Wood, D. (2011). Improving Voluntary Water Quality Programs: facilitating learning and adaptation. Environmental Management, 47(5) pp. 907-916

Genskow, K., Wood, D. & Floress, K. (2011). Evaluating outreach activities during project implementation, Genskow, K. and L. Prokopy (Eds.). *The Social Indicator Planning and Evaluation System (SIPES) for Nonpoint Source Management: A Handbook for Watershed Projects*. 3rd Edition. Great Lakes Regional Water Program. (104 pages).

Genskow, K. and Wood, D. (2009). Measurement, Learning, and Adaptation in Planning and Implementing Voluntary Non-Point Source Watershed Programs. Journal of Planning Literature 24(2) pp. 137-154.

Prokopy, L., Genskow, K., Asher, J., Baumgart-Getz, A., Bonnell, J., Broussard, S., Curtis, C. Floress, K., McDermaid, K., Power, R., & Wood, D. (2009). Designing a regional system of social indicators to evaluate nonpoint source water projects. Journal of Extension. 47(2): Feature Article 2FEA1.

Wood, D., Genskow, K., & McDermaid, K. (2008). Indicator descriptions and development. In *The Social Indicator Planning and Evaluation System (SIPES) for Nonpoint Source Management: A Handbook for Projects in USEPA Region 5*. K. Genskow, L. Prokopy (Eds.). Great Lakes Regional Water Program. Publication Number: GLRWP-08-SI01 (169 pages).

Selected Presentations and Forums

Wood, D., (2024, March 4-5). Climate Security Roundtable Workshop on Urban Systems, National Academies of Sciences, Engineering, and Medicine (NASEM)

Wood, D., (2023, November 7). National Security Policy Analysis Forum, Department of Defense

Wood, D., Marie, H., Aqlan, F., Brockman, J., Meyers, K. L., & Lapsley, D. (2023, June 25-28). Replicating a Community-Engaged Educational Ecosystem: First Year Findings, presented at the American Society of Engineering Education, Baltimore, MD.

Bello, K., Aqlan, F., & Wood, D. (2023, June 25-28). A Program to Engage Undergraduate and High School Students in Community-based Research, presented at the American Society of Engineering Education, Baltimore, MD.

Wood, D., Jacobs, C., Peters, B., Speir, S., Bolster, D., Tank, J. L., Shang, L., Wei, N., Wang, D. (2023, June 11-15), Mixed Motivations: The Case for Nested Engagement Strategies in Groundwater Citizen Science, presented at Society and Natural Resources conference, Portland Maine

Wood, D., (2022, December 5). CSIS Private Roundtable: Climate Adaptation in Pakistan: A U.S.-Pakistan Cooperation Opportunity

Wood, D., Marie, H., Aqlan, F., Brockman, J., Lapsley, D., & Meyers, K. L. (2022, June 26-29). Building and Replicating a Community-Engaged Educational Ecosystem - a STEM Learning Commons, presented at the National Science Foundation Improving Stem Undergraduate Education Summit, Washington, D.C.

Wood, D. (2020, June 21-24). Critical Findings from the Bowman Creek Educational Ecosystem Pilot. American Society for Engineering Education Annual Conference, presented at the American Society for Engineering Education (virtual).

Wood, D., Gura, A., Brockman, J., Rayna Carolan-Silva, A., Boukdad, S., & Alarcon, J. C. (2019, June 16-19). Informing Replication of the Bowman Creek Educational Ecosystem Pilot, presented at the American Society for Engineering Education, Tampa, Florida.

Wood, D. (2018, October 5). Data for Change. Keynote Speaker at the Midwest Clinical Law Conference, Notre Dame, IN.

Wood, D., Gura, A. Brockman, J., Gilot, G., Boukdad, S., and Krug, M. (2018, October 3). The Community-Engaged Educational Ecosystem Model: Learning from the Bowman Creek Experience. Workshop at the Engaged Scholarship Consortium, Minneapolis, MN.

Wood, D., Gura, A., Brockman, J., & Alptekin, S. (2018, June 24-27). Student Outcomes in Academic Community Engaged STEM projects with Multi-Dimensional Diversity. Poster presented at the American Society for Engineering Education, Salt Lake City, Utah.

Wood, D., Long, J, Beckman, M. and Moffitt, M. (2017, September 15). Knowledge in Service: Methodologies for Understanding the Impacts of Investment in Community-Based Research, Presented at the International Association for Research on Service Learning and Community Engagement, National University of Ireland-Galway, Ireland.

Sharpe, S., Wood, D., Kelly, A., Wilson, B., et. al. (2017, March 25). Implications of “Neighbor” for CST and Development. Presented at Soul of Development Conference, University of Notre Dame, South Bend, IN.

Wood, D., et. al. (2017, January 12). Community-Based Research, Partnership, and Academic Outcomes. Presented at Incorporating Broader Impacts and Diversity into your Proposals Workshop, Office of the Provost and ND Research, University of Notre Dame, South Bend, IN.

Wood, D. (2016, July 27). Community Indicators and Collective Impact. Presented at The Community Development Society and International Association for Community Development Annual International Conference, Bloomington, MN

Beckman, M., & Wood, D. (2016, May 26). Getting to community impact through academic community engagement. Presented at the Community Engagement Faculty Institute, University of Notre Dame, Notre Dame, IN.

Gura A., Beckman, M., & Wood, D. (2015, October 9) Bowman Creek Signature Project, at Coalition of Urban and Metropolitan Universities Conference, Presented to Coalition of Urban and Metropolitan Universities, Omaha, NE.

Sisk M.L. & Wood, D. (2015, November 6-8) Involving Students in Community Based Mapping Projects at the University of Notre Dame. Presented (by Dr. Sisk) at Collaborating Digitally: Engaging Students in Public Scholarship, Bucknell University.

Beckman, M., & Wood, D. (2015, May). CBR and Community Impact. Presented at Community Engagement Faculty Institute. University of Notre Dame, Notre Dame, IN.

Beckman, M., Tryon, E. and Wood, D. (2015, March 28). Getting to community impact through academic community engagement. Presented at The Research Universities Civic Engagement Network (TRUCEN). University of Notre Dame, South Bend, IN.

Beckman, M. and Wood, D. (2015, March 24). Addressing the Second Foot of Social Justice. Presented at CST Conference, Gaudium et Spes, University of Notre Dame, South Bend, IN.

Wood, D. (2014, November 17). Getting to impact in communities. Presented at Sustainable Civic and Community Engagement Conference. Indiana University Northwest, Gary, IN.

Wood, D. (2014, October 7). Getting to impact in communities: Focusing at the systematic level. Poster presentation at Engaged Scholarship Consortium. University of Alberta, Edmonton, Alberta, Canada.

Wood, D. (2012, October). From Community Indicators to a Community Resilience System: examining local systems for facilitating change in two cities. Presented at the National Conference of the Associated Collegiate Schools of Planning (ACSP), Cincinnati, OH.

Wood, D. (2011, October) Facilitating Change: from Visioning to Community Indicators. Presentation at the National Conference of the Associated Collegiate Schools of Planning (ACSP), Salt Lake City, UT.

Power, R. and Wood, D. (2009) Human Dimensions of Water Resources Management: developing a community of practice. Presentation at the USDA National Water Conference, St. Louis, MO; 2009.

Wood, D. & Genskow, K. (2008) Social indicators for watershed management. Presentation at the International Symposium for Society and Resource Management, Burlington, VT.

Wood, D. (2004). Sustainability Indicators. Presentation at the Earth Charter Summit, Madison, WI.

Community Service and Appointed Positions

- Governing Board, Purple Porch Cooperative, South Bend, IN (2019-2022)
- Policy Advisory Committee, United Way of St. Joseph County, South Bend, IN (2018-2022)
- Indiana Clinical and Translational Sciences Institute Community Health Enhancement Program (CTSI CHEP) Board (2016-2019)
- Poverty Initiative, United Way of St. Joseph County, South Bend, IN (2015-2018)
- SJC Cares Trauma-informed System of Care, Leadership Team, South Bend, IN (2015-2018)
- Green Ribbon Commission, South Bend Mayoral Appointment, South Bend, IN (2014-2018)
- Goodman Community Center, Board of Directors, Madison, WI (2005-2008)
- Dane County Environmental Council, appointed by Dane County Executive, (2000-2003)

Professional Activities

Journal and Grant Invitation to Review

NSF – Smart and Connected Community Communities, Improving Undergraduate STEM Education
National Institute of Food and Agriculture (NIFA); Review Panel for National Integrated Water
Quality Program (NIWQP) Grants, Evaluation Section
Indiana CTSI; Review Panel for Community Health Engagement Program Grant
Environmental Management Journal
American Society of Engineering Education
Community Development

Professional Memberships and Associations

Community Development Society; American Society of Engineering Education
Indiana Evaluation Association; Minnesota Evaluation Association; Michigan Evaluation Association