ADAM WIECHMAN

CURRICULUM VITAE

(January 2026)

Email: aw9050@princeton.edu
Web: adamwiechman.github.io
Office: Briger Hall, A426D

High Meadows Environmental Institute
Princeton University
Princeton, NJ

KEYWORDS: infrastructure, water, climate policy, institutions, collaborative governance, information processing, policy process, dynamical systems, computational methods, resilience, robustness, sustainability

EDUCATION

(2025) **Ph.D. in Sustainability, Arizona State University, School of Sustainability**
Concentration: Complex Adaptive Systems Science
Dissertation: *Designing Climate-Ready Institutions for Public Infrastructure Investment*
Committee: John M. Anderies (Chair), Margaret Garcia, Elizabeth Koebele

(2020) **B.S. in Environmental Engineering, University of Notre Dame**
B.A. in Political Science, University of Notre Dame

PROFESSIONAL EXPERIENCE

(2025-) **Postdoctoral Research Associate, High Meadows Environmental Institute, Princeton University.** Mentors: Simon Levin and Elke Weber

(2022-2025) **National Science Foundation Graduate Research Fellow, Arizona State University**

(2021-2022) **Graduate Teaching Assistant, School of Sustainability, Arizona State University**

(2020-2021) **Graduate Research Assistant**, **Arizona State University**
Urban Water Transitions. PI: Margaret Garcia and John M. Anderies
Colorado River Visualization Enterprise. PI: Kathryn Sorensen

(2018-2020) **Undergraduate Research Assistant, University of Notre Dame**
Refugee Migration and Distribution of Water Stress. PI: Marc F. Müller

(2019) **Water Engineering Manager, Fundación Ingenieros en Acción** (Quito, Ecuador)

(2018) **U.S. Municipal Water Industry Analyst, Bluefield Research** (Boston, MA)

(2017) **Policy Research Analyst, North Carolina Sustainable Energy Association** (Raleigh, NC)

PUBLICATIONS

Peer-Reviewed Journal Articles

6. **Wiechman, A.,** Koebele, E., Garcia, M., Anderies, J.M. (2026). The Inclusion Trade-off: Comparing the Design and Functionality of Collaborative Governance Forums. *Policy Studies Journal.* https://doi.org/10.1111/psj.70099
5. Deslatte, A., Koebele, E. A., & **Wiechman, A.** (2025). Embracing the ambiguity: Tracing climate response diversity in urban water management. *Public Administration*, 103(1), 250–272. https://doi.org/10.1111/padm.13017
4. **Wiechman, A.,** Alonso Vicario, S., Anderies, J. M., Garcia, M., Azizi, K., & Hornberger, G. (2024). Institutional Dynamics Impact the Response of Urban Socio-Hydrologic Systems to Supply Challenges. *Water Resources Research* 60(2), e2023WR035565. https://doi.org/10.1029/2023WR035565
3. Deslatte, A., Koebele, E., Bartels, L., **Wiechman, A**., Alonso Vicario, S., Coughlin, C, Rybolt, D. (2023) Institutions, Voids, and Dependencies: Tracing the Designs and Robustness of Urban Water Systems. *International Review of Public Policy* 5:2.

2. **Wiechman, A.,** Alonso-Vicario, S., Koebele, E. (2023) The Role of Intermediate Collaborative Forums in Polycentric Environmental Governance. *Journal of Public Administration Research & Theory* 34(2), 196-210. https://doi.org/10.1093/jopart/muad017
1. Bertassello, L., Muller, M.F., **Wiechman, A.,** Penny, G., Tuninetti, M., Muller-Itten, M. (2023) Food demand displaced by global refugee migration influences water use in already water stressed countries. *Nature Communications* 14, 2706. https://doi.org/10.1038/s41467-023-38117-0

Under Review

Wiechman, A., Anderies, J.M., Garcia, M. Politics, Inequality, & Robustness of Shared Infrastructure Systems in the Anthropocene

Wiechman, A., Deslatte, A., Koebele, E., Garcia, M., Anderies, J.M. Organizational Choice and System Robustness: A Mixed-Method Investigation of the Institutional Architecture Managing Complex Systems.

Alonso Vicario, S., Hornberger, G.M., **Wiechman, A.,** Mazzoleni, M., Garcia, M. Urban Water System Vulnerability under Climate Change, Demand Growth, and Institutional Friction

In Progress

Wiechman, A., Deslatte, A., Bizyaeva, A., Levin, S., Sustainable Infrastructure Transitions in Polycentric Governance Systems Facing Uncertainty: A General Modeling Approach.

Kumar, A., Perri, S., **Wiechman, A.**, Zajdela, E., Levin, S. Navigating Path Dependence in Institutional Design.

Garcia, M., Deslatte, A., Koebele, E.A., Hornberger, G.M., **Wiechman, A.**, Anderies, J.M., Barnes, J., Alonso Vicario S., Azizi, K., Design for Dynamic Fitness: Archetypes of urban water systems.

AWARDS AND HONORS

(2025) Outstanding Graduating Student & Convocation Speaker, College of Global Futures, ASU
(2024) Beijer Young Scholar, Beijer Institute of the Royal Swedish Academy of Sciences
(2024) Conference Fee Waiver, Midwest Political Science Association (MPSA)
(2022) Second Place, Central Arizona Project (CAP) Award for Water Research
(2020) Guillermo O'Donnell Prize, Best Senior Thesis in Comparative Politics
Department of Political Science, University of Notre Dame
(2020) Reverend Thomas A. Steiner Award, Top Senior Student
College of Engineering, University of Notre Dame
(2019) Dr. Raymond C. Gutschick Award, Most Promise in Research
Department of Civil & Environmental Engineering & Earth Sciences, Notre Dame
(2019) John J. Reilly Prize, Recognized Rising 5th Year Scholar
John J. Reilly Dual-Degree Program, University of Notre Dame

GRANTS AND FELLOWSHIPS

(2020-2025) National Science Foundation, Graduate Research Fellowship Program (GRFP)	$159,000
(2024) Culminating Experience Grant, ASU School of Sustainability	$2,000
(2024) Individual Travel Grant, Graduate Professional Student Association, ASU	$950
(2024) Graduate College Travel Award, ASU	$300
(2024) University Graduate Fellowship (UGF), ASU School of Sustainability	$265
(2023) University Graduate Fellowship (UGF), ASU School of Sustainability	$1,200
(2022) Individual Travel Grant, Graduate Professional Student Association, ASU	$950
(2022) Graduate College Travel Award, ASU	$100
(2021) Individual Travel Grant, Graduate Professional Student Association, ASU	$950

(2021) Career Development Grant, Graduate Professional Student Association, ASU $125
(2021) Graduate Research Grant, Earth System Science for the Anthropocene (ESSA), ASU $10,000
(2019) Conference Presentation Grant, University of Notre Dame $700
(2018) Downes Summer Internship Program in Public Service Grant, University of Notre Dame $2,500
(2017) DeSalvo Family Undergraduate Internship Fund Grant, University of Notre Dame $3,500

CONFERENCE ACTIVITY

Presentations

(Dec 2025) **American Geophysical Union.** Modeling Adaptive Polycentric Infrastructure Governance Under Financial, Social, and Climate Uncertainty.
(Oct 2025) **National Sustainability Society.** Uncertainty and Sustainable Infrastructure Governance.
(Dec 2024) **American Geophysical Union.** Can the Politics of Infrastructure Investment Adapt to Environmental Change? A General Dynamical Systems Approach.
(Sept 2024) **National Sustainability Society.** Institutions and the Robustness of Urban Water Systems.
(June 2024) **Workshop on the Ostrom Workshop.** The Inclusion-Consensus Trade-off for Collaborative Forums in Polycentric Environmental Governance: A Comparison of Arizona Water User Associations.
Workshop on the Ostrom Workshop. Connecting Institutional Design to Infrastructure System Robustness: A Mixed Methods Story of Collective Inference.
(April 2024) **Midwest Political Science Association.** A General Model of the Political Dynamics and Institutional Trade-offs in Large Public Infrastructure Systems.
(Mar 2023) **International Association for the Study of the Commons Spring Workshop.** Institutional Information Processing, Feedback Control, and Dynamic Modeling.
(Jan 2023) **Conference on Policy Process Research.** Capturing the Policy Process in Dynamic Models of Coupled Infrastructure Systems: An Urban Water Example.
(Sept 2022) **Arizona Hydrological Symposium.** Using Soft Infrastructure to Manage Uncertainty: Collaboration in Phoenix Surface Water Governance.
(June 2022) **Institutional Grammar Research Institute.** Institutional Grammar & Dynamic Coupled Infrastructure System (CIS) Modeling: An Urban Water Example.
(May 2022) **Public Management Research Conference.** Using Soft Infrastructure to Manage Uncertainty: Collaboration in Phoenix Surface Water Governance.
(Sept 2021) **Arizona Hydrological Symposium.** Incorporating Institutional Dynamics in Models of Urban Water Coupled Infrastructure Systems.
(Sept 2021) **Sociohydrology Conference.** Modeling Urban Water Coupled Infrastructure Systems.
(May 2021) **International Association for the Study of the Commons.** Modeling Urban Water Coupled Infrastructure Systems.
(Feb 2020) **Human Development Conference.** The Case for a Third Party: Modeling the Effect of Mediation on Collaborative Water Governance in Rural Ecuador.

Organized Sessions

(Dec 2025) **American Geophysical Union.** Advances in Modeling and Governing Interacting Shocks in the Anthropocene.
(Dec 2025) **American Geophysical Union.** Multisector Dynamics: Preparing the Next Generation of Researchers to Meet Transdisciplinary Environmental Challenges
(Sept 2025) **Santa Fe Institute Postdocs in Complexity Conference.** Robust Institutional Design in Expert-Decision Maker Systems Under Uncertainty.
(April 2021) **Center for Behavior, Institutions, and the Environment Colloquium Series.** A Discussion on the Role of Institutional Scientists in Research & Beyond.

Posters

(Dec 2021) **American Geophysical Union.** Crossing the "Policy Process Gap" & Modeling Urban Water Coupled Infrastructure Systems.

(Dec 2019) **American Geophysical Union.** Implications of the Syrian Civil War and Refugee Crisis on Virtual Water.

INVITED TALKS

(Nov 2025) **Aspen Global Change Institute.** The Institutional Dynamics that Shape Climate-Adaptive Infrastructure Investment. Workshop on Human Behavior in Global Change Models.

(June 2021) **Gonzaga Debate Institute.** Protecting Water Resources in the United States. Gonzaga University (Virtual, Spokane, WA)

TEACHING EXPERIENCE

Courses Taught

Systems Thinking, SOS 220 (Summer 2024), Instructor
Sustainable World, SOS 110 (Spring 2022), Co-Instructor

Guest Lectures

Understanding Political Systems with Computational Modeling. (March 2024) Systems Thinking

Teaching Assistant

Introduction to Applied Mathematics for the Social Sciences, SOS 101 (Fall 2021)
Lectured: Exponential Growth Models, Logistic Growth Models, Predator-Prey Models
Developed and administered final project, "Arizona Groundwater & Model-Informed Policy"
Calculus and Probability, SOS 211 (Fall 2021)

SERVICE TO PROFESSION

Journal Reviewer

Policy Studies Journal, Journal of Public Administration Research & Theory, Public Management Review, Policy & Politics, Environmental Policy and Governance, International Review of Administrative Sciences, Journal of Hydrology, iScience

Leadership

(2025-) Early Career Working Group, Multi-Sector Dynamics Research Community
(2024) Conference Volunteer, National Sustainability Society
(2023-2024) Graduate Student Writing Group Coordinator, Conference on Policy Process Research

SERVICE TO DEPARTMENT AND UNIVERSITY

Advising and Mentoring

Distinguished Advisor (2020-2024), NSF GRFP, Office of Distinguished Graduate Fellowships, ASU
Emmalyn Meyer (2024-2025), Undergraduate Thesis Committee Member, Barrett Honors College, ASU
Aurora Cossairt (2023-2025), Research and Graduate Program Mentor, School of Sustainability, ASU

Leadership

Graduate Student Representative (2024), School of Sustainability, ASU
Graduate Student Writing Group Coordinator (2023-2024), School of Sustainability, ASU
Assembly Member At-Large (2021-2022), Graduate Professional Student Association, ASU

Committees: Wellness, Graduate Student Advocacy, Graduate College
Student Representative (2018), Energy & Emissions Working Group, Notre Dame

ADDITIONAL TRAINING PROGRAMS

(2025) Postdocs in Complexity Conference, Santa Fe Institute (SFI)
(2024) Clean Energy and Equitable Transportation Solutions (NSF-UKRI Global Center) Fall School
(2023) Joint Modeling Spring School Arizona State University and Math+ Cluster Berlin
(2022) Graduate Student Workshop, Institutional Grammar Research Institute (IGRI)
(2021) Participatory Modeling Field School, Michigan State University
(2021) International Winter School: Agent-Based Modeling of Social-Ecological Systems, CoMSES Net

PROFESSIONAL MEMBERSHIPS AND AFFILIATIONS

Research Affiliations

(2025-) Behavioral Science for Policy Lab, Princeton
(2025-) Levin Lab, High Meadows Environmental Institute, Princeton
(2024-) Beijer Young Scholars (BYS) Program, Beijer Institute of Ecological Economics, Stockholm, Sweden
(2020-2025) Graduate Affiliate, Center for Behavior, Institutions, and the Environment (CBIE), ASU
(2022-2025) Student Affiliate, Koebele Group, Department of Political Science, University of Nevada, Reno

Association Memberships

Public Management Research Association
American Political Science Association – Section: Science, Technology, and Environmental Policy
Midwest Political Science Association
Conference on Policy Process Research
National Sustainability Society
American Geophysical Union - Sections: Hydrology, Global Environmental Change, Science & Society
International Association for the Study of the Commons

RELATED PROFESSIONAL SKILLS

Software

Julia, R, Python, NetLogo, XPP-Aut, NVIVO, MatLab, GIS, AnyLogic, Microsoft Office

Languages

Spanish (reading & writing proficient, intermediate conversational)