**CHRISTINE J. KIRCHHOFF**

**EDUCATION**

University of Texas, Austin Civil Engineering B.S., 1994-1998

University of Texas, Austin Env. & Water Resources Engineering M.S., 2001

University of Michigan, Ann Arbor Resource Policy & Behavior Ph.D., 2004-2010

University of Michigan, Ann Arbor Science, Technology & Public Policy Grad. Cert., 2010

University of Michigan, Ann Arbor Graduate Teaching Fellow 2010

University of Colorado, Boulder Postdoc, Sci. & Tech. Policy Res. 2010-2011

University of Michigan, Ann Arbor Postdoc, Nat. Res. & Environment 2011-2013

**Professional Education & Professional Development**

Initiative for Faculty Success and Equity Workshop 2024

Advancing Antiracism, Diversity, Equity, and Inclusion in STEMM Organizations: 2024

Current Context and Challenges, NASEM

Foundations of Diversity, Equity, and Inclusion, Inclusive Leadership in Equity, 2024

Allyship and Diversity (ILEAD) Program, Penn State

Penn State Emerging Academic Leadership (PSEAL) Program, Penn State 2023

Acknowledgement of Land – Recognizing and Respecting Indigenous Peoples 2023

ILEAD Program, Penn State

National Science Foundation, Game Changer Academy 2019 - 2021

**FACULTY APPOINTMENTS**

Penn State University

Associate Professor Law, Policy and Engineering (Primary) 2022 - present

Associate Professor of Civil and Environmental Engineering (Secondary) 2022 - present

University of Connecticut

Gratis Associate Professor of Civil and Environmental Engineering 2022 - present

Gratis Associate Professor of Natural Resources and Environment 2022 - present

University of Connecticut

Department of Civil and Environmental Engineering

Associate Professor 2020 - 2022

Castleman Professor in Engineering Innovation 2019 – 2021

Assistant Professor 2013 – 2020

**Other Appointments**

Penn State University

Associate Director of Law, Policy and Engineering and Associate 2022 – present

Affiliated Faculty, Institute for Energy and Environment 2022 - present

Affiliated Faculty, Institute of Sustainability 2022 - present

Affiliated Faculty, Social Science Research Institute 2022 - present

Global Council for Science and the Environment

Senior Advisor for Actionable Knowledge 2022 - 2023

University of Connecticut

Affiliated Faculty, Connecticut Institute for Resilience and Climate Adaptation 2014 - 2022

Affiliated Faculty, Department of Natural Resources and Environment 2014 - 2022

The National Academies, Board on Atmospheric Sciences & Climate

Research Associate, Committee on a National Strategy for Advancing Climate Modeling2011

**PROFESSIONAL EXPERIENCE & REGISTRATION**

Turner Collie and Braden, Inc. (now AECOM), Austin, Texas

Project Manager 2002 - 2004

Project Engineer 1998 - 2002

Registered Professional Engineer, Texas. No. 91864

**HONORS AND AWARDS**

Chapter Lead for the Northeast Chapter of the Sixth National Climate Assessment (NCA6) 2024 – 2027

Member, Public Infrastructure for Effective Climate Mitigation and Adaptation: 2024

A Workshop, May 20 & 29, 2024, National Academies of Science, Engineering and

Medicine, Division of Behavioral And Social Sciences and Education, Board on

Environmental Change and Society.

Co-Coordinating Lead Author (CLA), Chapter 8: Policy options and solutions in a 2023 - 2025

complex and changing environment in the North American Biodiversity and Climate

Change Assessment led by the United States Geological Survey (USGS).

Penn State Emerging Academic Leaders (PSEAL) 2023

National Academies of Engineering German American Frontiers in Engineering, 2023

US Participant (1 of 30 US participants).

Contributing author, IPCC AR6 Chapter 6: Cities, Settlements and Key Infrastructure 2022

NSF CAREER Award 2020 - 2025

Game Changer Academy, Fellow and Advanced Panel Fellow 2019 - 2023

School of Engineering, Castleman Professor in Engineering Innovation 2019 - 2021

Family Support Award, University of Connecticut Graduate School 2017

Service Learning Faculty Fellow 2015 – 2016

Outstanding Reviewer, Climate Risk Management 2015

Best Dissertation, University Council on Water Resources 2011

Co-professor of the Month, Network of Conservation Educators and Practitioners 2011

University of Michigan, School of Natural Resources and Environment 2008

Ayers-Brinser Award, awarded annually to one PhD student who has shown particular

excellence in the study of natural resource policy and management

Dan David Prize 2008

University of Michigan, Rackham Fellow 2004 – 2010

**Student Awards**

Sarah Torhan, Doctoral Student, Exemplary Poster Presentation in Civil Engineering 2024

For the National Defense Science and Engineering Graduate Fellowship Program

5th Annual Conference

Sarah Torhan, Doctoral Student, The Penn State Alumni Association Scholarship for 2024

Penn State Alumni in the Graduate School

**RESEARCH**

[**Google Scholar**](https://scholar.google.com/citations?hl=en&view_op=list_works&gmla=AGd7smHZzlXx-KiKLDxKaSFwWC6gRqxNRtRLA8XTaT_k1BLM0gt8IUqETT4dQYbPSeZ9O3yIQsxQEZE8enWaqA&user=KnY_uykAAAAJ) **analysis on 1/31/2025**

Citations: 4082

h-index: 27

i10-index 40

[**Sage Policy Profile**](https://policyprofiles.sagepub.com/profile/16383/christine-kirchhoff) **analysis**

1/31/2025 Policy and grey literature citations of research: 173 citations across 140 policy documents; 23 policy documents that cite my work have been cited 910 times in 500 other policy documents

8/7/2024 Policy and grey literature citations of research:153 citations across 125 policy documents

19 policy documents that cite my work have been cited a further 933 times in 500 other policy documents

My work on boundary organizations and making climate information actionable has informed:

Measuring progress on adaptation and climate resilience: recommendations to the Government of Canada / Expert Panel on Climate Change Adaptation and Resilience Results, Canada Environment and Climate Change Canada, 2024

Develop medium to long term climate information services to enhance comprehensive climate risk management in Africa, International Development Research Center, 2023

Advancing Health & Disaster Resiliency in Minnesota (Whitepaper), State of Minnesota, 2022

The Politics of Climate Change and Uncertainty in India, 2021

The 2017-2018 drought in the Argentine Pampas: Impacts on Agriculture, UN Office of Disaster Risk Reduction, 2021

National agrometeorological services and pest and disease early warning in Asia and the Pacific, Food and Agriculture Organization of the United Nations, 2021

AR6 Climate Change 2021: The Physical Science Basis, IPCC, 2021

A low-to-no snow future and its impacts on water resources in the western United States, Living Lakes Canada, 2021

My work on human dimensions of resilient infrastructure and climate assessments has informed:

Climate Change Health Effects in the UK, UK Health Security Agency, 2023

AR6 Climate Change 2022: Impacts, Adaptation, and Vulnerability, IPCC, 2022

Principles for Resilient Infrastructure, UN Office for Disaster Risk Reduction, 2022

Grounded: An enterprise-wide look at Department of the Air Force Installation Exposure to Natural Hazards, 2021

Chemicals, Wastes and Climate Change: Interlinkages and Potential for Coordinated Action, UNEP, 2021

My work on water governance and water security has informed:

Principles for Resilient Infrastructure, UN Office for Disaster Risk Reduction, 2022

Michigan’s Adaptive Management Plan to Reduce Phosphorus Loading into Lake Erie, State of Michigan, 2021

**Professional Development**

Story Circles, The Transforming Power of Story by Dr. Timothy Eatman 8/2024

Building Culturally Conscious Spaces in Higher Ed facilitated by Dr. LaWanda 8/2024

Ward and Dr. Nicole Webster

Getting your message out for scientists and engineers: Strategies to amplify your science 2/2024

and technology policy analysis, National Science Policy Network

The Power of Historically Black Colleges and Universities: Establishing and Strengthening 2/2024

Partnerships

**Grant Funding (current and completed)**

Direct: $4.94 M

Total: $17.1 M

**Research Grant Support (Pending or In Preparation)**

Schmidt VIEW: A Transformational Digital Earth Water Framework to Support Resiliency in a World of Changing Extremes, PI

NSF SCC: SCC-IRG Track 1: Climate-proofing communities against water shortages by coproducing a stakeholder-oriented smart data-model fusion system, Co-PI

NSF RCN UCCAN: Innovating for Vulnerable Populations - A Research Network for Sustainability, Resiliency, and Community Well-being, PI, $152,000, 4/2025 – 3/2027

**Research Grant Support (Current)**

NSF CIVIC: CIVIC-PG Track A: Accelerating Coproduced Flood Resilience in Underserved Levee Communities, Co-PI, 8/2024 – 4/2025, $74,997

5th California Climate Change Assessment, Water Adaptation Progress Synthesis Report, **Co-PI** with Christopher Hyun (California State Water Resources Control Board).

PSU CSRAI Seed Grant, Understanding the Prevalence of Drinking Water Service Disruption through Large-Scale Analysis of News Articles and Social Media, **PI,** $25,000 (not counted in total grant funding).

PA Sea Grant, A comprehensive assessment of the barriers and drivers of GSI adoption centered on ordinances in small and small to medium-sized municipalities in Pennsylvania, **PI,** 2/1/2024 – 1/31/2026, $111,584.

National Council of State Legislatures, Commonwealth of Pennsylvania Science and Technology Policy Fellowship, **PI,** 10/1/2023 – 09/30/2024, $100,000

Mississippi Sea Grant Law Center, Learning climate resilience: Investigation of the Maine Climate Adaptation Planning policy for climate resilient wastewater infrastructure, **PI**, 7/1/2023 – 6/30/2024, $75,000

DOD MURI Sea-Level Rise in the Indo-Pacific Region: Building a Framework for Interdependent Resilience, **Co-PI** with Mark Merrifield (UCSD/Scripps), 5/1/2023 – 4/30/2028, $5.6 million ($640,000 PSU)

Supplement to NSF CAREER: Humanizing Engineering and Resilience: An Integrated Research and Education Approach to Understand and Enhance Infrastructure Resilience, **PI**, 6/1/2020 - 5/31/2025, $44,753.

NSF DISES: Coproducing Actionable Science to Understand, Mitigate, and Adapt to Cyanobacterial Harmful Algal Blooms (CHABS), **PI**, 6/1/21 – 5/31/2025, $1,599,997

NSF EFRI E3P: CAS-MNP: Engineering Suspension Feeder Systems for Separation and Elimination of Microplastics from Water, **Senior Personnel** with PI Leslie Shor (UCONN), 3/21-2/20, $2,000,000.

NSF DRMS: Financial health, risk, water management, **Co-PI** with PI Sara Hughes (University of Michigan), 6/1/2020 – 5/31/2023, $477,631

NSF CAREER: Humanizing Engineering and Resilience: An Integrated Research and Education Approach to Understand and Enhance Infrastructure Resilience, **PI,** $500,076, 6/1/2020 - 5/31/2025.

**Research Grant Support (Completed)**

PSU IEE Seed Grant, Understanding the scope, drivers, and energy justice implications of solar adoption in the United States wastewater sector, **PI,** 7/1/2023 - 6/30/2024,$30,000 (not counted in total grant funding).

NSF EFRI E3P: CAS-MNP: Engineering Suspension Feeder Systems for Separation and Elimination of Microplastics from Water, **Senior Personnel** with PI Leslie Shor (UCONN), 3/21-2/20, $2,000,000.

AGU, *Illustrating innovations at the boundary of Earth science and society,* **Co-PI,** with PI Arnott (Aspen Global Change Institute) and Vano (University of Nevada), $10,000, 6/1/2019 – 5/31/2020.

NSF SciSIP, *Science Policy Research Report: Institutional Innovation to Close the Knowledge-Action Gap for Infrastructure*, **Co-PI,** with PI Katzenberger (Aspen Global Change Institute), $34,019, 08/01/2017 – 07/31/2018.

CT Department of Public Health, *Drinking Water Vulnerability and Resilience,* **Co-PI,** with PI O’Donnell (UConn), $600,000 12/1/2016-09/30/2017.

USDA/Agriculture and Food Research Initiative (AFRI): Water for Agriculture, *Assessing barriers to use of reclaimed wastewater for food production in controlled environment agriculture,* **Co-PI,** with PI Vadas (UConn), $499,971, 01/01/2017 – 12/31/2020.

NSF Coastal SEES, *Coastal SEES: Enhancing sustainability in coastal communities threatened by harmful algal blooms by advancing and integrating environmental and socio-economic modeling,* **Co-PI,** with PI Steiner (UMichigan), UConn budget $282,652, 9/1/2016 – 8/31/2019.

NOAA/Climate and Societal Interactions (CSI) Program/Sectoral Applications Research Program (SARP), *From precipitation thresholds identification to planning: Helping communities plan and adapt to future extreme events*, **PI,** $299,322, 7/1/2016 – 6/30/2018.

USEPA, *Valuation of Water Quality Change in Environment and Economy Context: Ecosystem Services* *across Gradients of Degradation and Local Economic Interest,* **Co-PI,** with PI Steve Swallow (UConn), $799,994

US DOE, *GAANN: Environmental engineering at the forefront of water policy and education* **Co-PI,** with PI Vadas (UConn), $738,195

CIRCA Municipal Resilience Grant Program, *Climate Adaptation and Resiliency Planning for Protection of Public Drinking Water*, **PI,** $26,027, 8/1/2016 – 8/31/2017.

NSF, CNH-RCN: *Amazon Dams Network: Advancing Integrative Research and Adaptive Management of Social-Ecological Systems Transformed by Hydroelectric Dams* with colleagues at the University of Florida, **Senior Personnel,** with PI Loiselle (UFlorida), $499,818, 7/1/2016-6/30/2021

Connecticut Sea Grant, *Resilient Coastal Communities under Wind and Flood Hazards: Understanding Trade-offs in Residential Building Designs* **Co-PI,** with W. Zhang (PI), award # R/CH-1, $199,557 (including $69,557 matching funds), 2/1/2016-1/31/2018.

Connecticut Department of Energy and Environmental Protection (CTDEEP), *Municipal Resilience Planning Assistance Project* Task 7 **PI**, Vulnerability Assessment, $111,661, 10/31/2015-9/30/2017.

Eversource Energy, *Eversource Energy Center - Vegetation Management* **Co-PI,** with J. Volin (PI), $1,213,521, 6/1/2016-12/31/2017.

NOAA/Climate and Societal Interactions (CSI) Program, Coastal and Ocean Climate Applications (COCA), *Enhancing manager and stakeholder awareness of and responses to extreme precipitation effects on Lake Erie* **PI,** with D. Scavia (UM), A. Steiner (UM), Nathan Bosch (Grace College), M. Murray (National Wildlife Federation), and F. Lopez (Ohio Department of Natural Resources, Division of Wildlife), $275,617, 2013-16.

USGS CT Institute of Water Resources. *Evaluating and enhancing communities’ willingness to adopt N-Sink as a community based pollution mitigation decision tool* **PI,** with Barrett (Co-PI UConn), $46,607, 2014 – 2015.

**PUBLICATIONS**

Co-Authoring Mentees: Postdoc\*; Graduate Student; Undergraduate Student\*\*

**Peer-Reviewed Articles In Review**

Bizer M, **Kirchhoff CJ**, Segal JL, Patenaude, WL. Transforming takes a village plus a willingness to break down barriers and learn: an event history of transformation and resilience in critical infrastructure. *Journal of Environmental Management*

Raj C, Kalra M, Chiles RM, Kaye J, **Kirchhoff CJ**, Waigner L. A systematic review of ecosystem services modeling for environmental health assessment. *Ecological Indicators*

**Kirchhoff CJ**, Michaud L, Gupta B, Liu Y, Strazzabosco A. Exploring renewable energy transitions in energy intensive sectors: A comparative case study of solar adoption among wastewater systems in California and New York. *Journal of Cleaner Production*

Hughes S, **Kirchhoff CJ,** Lee M, Switzer D. Understanding the Cost of Basic Drinking Water Services in the U.S.: A national assessment. *AWWA Water Science*

Veisi H\*, **Kirchhoff CJ**. Unpacking the Success among Water Quality Collaborative Governance Efforts in the United States. *Environmental Science and Policy*

**Kirchhoff CJ,** Parris A, Lough G, Centering Equity and Justice in Climate Assessment. *Proceedings of the National Academies of Science*

Timm K, et al. Building Capacity for Actionable Science: A Collective Institutional Shift. *Nature Sustainability*

**Published Peer-Reviewed Articles**

**2025**

50. Hughes S, **Kirchhoff CJ,** Lee M, Switzer D. 2025. Understanding the Cost of Basic Drinking Water Services in the U.S.: A national assessment. *AWWA Water Science,* 7:e70014. Doi: 10.1002/aws2.70014

**2024**

49. **Kirchhoff CJ**, Mullin CA\*, Denny R\*\*, Lemos MC, Treuer G. 2024. Understanding the intersecting social, technical, and ecological systems challenges associated with emerging contaminants in drinking water using cyanotoxins as an example. *Journal of Infrastructure Preservation and Resilience,* 5:16. 10.1186/s43065-024-00111-1

48. Joe, E.T., Koneru, S.D., Kirchhoff, C.J. 2024. Assessing the Effectiveness of GPT-4o in Climate Change Evidence Synthesis and Systematic Assessments: Preliminary Insights. Proceedings of the 1st Workshop on Natural Language Processing Meets Climate Change (ClimateNLP 2024). Bangkok, Thailand. Available at: https://aclanthology.org/2024.climatenlp-1.20.pdf

47. McOmber C\*, **Kirchhoff CJ**. 2024. State ‘Pandemic Pods’: US regional coalitions and their responses to the COVID-19 pandemic. *Risk, Hazards & Crisis in Public Policy*; 1-23. DOI: 10.1002/rhc3.12323.

1. Shukla R, Maskell G, Jagannathan K, Browne K, Ulibarri N, Campbell D, Franz C, Grady C, Joe ET, **Kirchhoff CJ**, Madhavan M, Michaud L, Shama S, Singh C, Orlove B, Alverio GN, Ajibade J, Bowen K, Chauhan N, Galappaththi EK, Hudson AJ, Mach KJ, Musah-Surugu JI, Petzold J, Reckien D, Schauberer B, Segnon AC, van Bavel B, Gornott C. (accepted). Dichotomy or Continuum? A global review of the interaction between autonomous and planned adaptations. *Ecology & Society*

45. Wannewitz M, Ajibade I, Mach KJ, Magnan A, Petzold J, Ulibarri N, Agopian A, Chalastani V, Hawxwell T, **Kirchhoff CJ**, Huynh LTM, Miller R, Musah-Surugu JI, Nagle Alverio G, Nielsen M, Nunbogu AM, Pentz B, Reckien D, Reimuth A, Scarpa G, Seeteram N, Villaverde Canosa I, Zhou J, Garschagen M. 2024. Progress and gaps in climate change adaptation in coastal cities across the globe. *Nature Cities,* 1, 610-619. https://doi.org/10.1038/s44284-024-00106-9

1. Friedman M, Hughes S, **Kirchhoff CJ**, Rauh E, McOmber C\*, Manshardt DJ, Prout JM. 2024. Broadening Resilience: An evaluation of policy and planning for drinking water resilience in 100 US cities. *Global Environmental Change,* 84, 102798. 10.1016/j.gloenvcha.2024.102798
2. Pearce, Craig L., van Knippenberg, Daan, **Kirchhoff CJ**. 2024. The Civil Engineering Leadership Dilemma: Is Calibrated Paradoxical Leadership the Answer? *Journal of Management in Engineering,* 40(3). https://doi.org/10.1061/JMENEA.MEENG-595
3. Hughes S, **Kirchhoff CJ**. 2024. A New Database for Municipal Drinking Water Systems. *Journal of the American Water Works Association,* 116(3), 58059. https://doi.org/10.1002/awwa.2249

**2023**

1. Petzold J, Hawxwell T, Jantke K, Gonçalves Gresse E, Singh C, Mach KJ, Ulibarri N, Ajibade I, Reckien D, **Kirchhoff CJ**, Reese P, Xu J, Joe ET, Nunbogu AM, Fischer AP, Schröder LS, Cremin E, Segnon AC, Shah MA, Hegde G, Färber L, Jeong J, Tello C, Sultana F, Campbell D. 2023. A global assessment of actors and their roles in climate change adaptation. *Nature Climate Change,* 13, 1250-1257. 10.1038/s41558-023-01824-z
2. Jagannathan K, Emmanuel G, Arnott J, Mach KJ, Bamzai-Dodson A, Goodrich K, Meyer R, Neff M, Sjostrom K Dana, Tim, KMF, Turnhout E, Wong-Parodi G, Bednarek AT, Meadow A, Dewulf A, **Kirchhoff CJ**, Moss R, Nichols L, Oldach E, Lemos MC, Klenk N. 2023*.* A research agenda for the science of actionable knowledge: Drawing from a review of the most misguided to the most enlightened claims in the science-policy interface literature. *Environmental Science & Policy* 144: 174-186. https://doi.org/10.1016/j.envsci.2023.03.004
3. Hughes S, **Kirchhoff CJ,** Conedera K, Friedman M. 2023*.* The Municipal Drinking Water Database. *PLOS Water* 2(4): e0000081. Doi: 10.1371/journal.pwat.0000081.

38. McOmber C\*, **Kirchhoff CJ**, Zhuang Y, Raudales R. 2023*.* Understanding greenhouse growers’ willingness to use municipal recycled water on food crops: the need for tailored outreach coupled with deep engagement to increase adoption. *Hort Technology* 33(2):161-167. <https://doi.org/10.21273/HORTTECH05132-22>.

**2022**

37. Bizer Matthew, **Kirchhoff CJ**. 2022. Regression Modeling of Combined Sewer Overflows to Assess System Performance. *Water Science and Technology,* 86(11): 2848-2860. doi: 10.2166/wst.2022.362

36. Eaton W, Burnham M, Robertson T, Arbuckle JG, Brasier KJ, Burbach ME, Church SP, Hart-Fredeluces G, Jackson-Smith D, Wildermuth G, Canfield KN, Cordova, SC, Chatelain CD, Fowler LB, Hendawy MM, **Kirchhoff CJ**, Manheim MK, Martinez RO, Mook A, Mullin CA, Murrah-Hanson AL, Onabola CO, Parker LE, Redd EA, Schelly C, Schoon ML, Sigler WA, Smit E, van Huysen T, Worosz MR, Eberly C, Rogers A. 2022. Advancing the scholarship and practice of stakeholder engagement in working landscapes: A co-produced research agenda. *Socio-Ecological Practice Research,* 4: 283-304. 10.1007/s42532-022-001

**2021**

35. Mach Katharine J, Reyes Rai Salas, Pentz Brian, Taylor Jennifer, Costa Clarissa A, Cruz Sandip G, Thomas Kerronia E, Arnott James C, Donald Rosalind, Janannathan Kripa, **Kirchhoff CJ**, Rosella Laura, Klenk Nicole. 2021. News media coverage of COVID-19 public health and policy information. *Humanities & Social Sciences Communications*, 8, 220, https://www.nature.com/articles/s41599-021-00900-z.

34. Araos M, Jagannathan K, Shukla R, Ajibade I, Coughlan de Perez E, Davis K, Ford JD, Galappaththi EK, Grady C, Judson AJ, Joe ET, **Kirchhoff CJ,** Lesnikowski A, Alverio GN, Nielsen M, Orlove B, Pentz B, Reckien D, Siders AR, Ulibarri N, van Aalst M, Abu TZ, Agrawal T, Berrang-Ford L, Kerr, RB, Coggins S, French E, Garschagen M, Harden A, Mach KJ, Nunbogu AM, Spandan P, Templeman S, Turek-Hankins LL. Equity in human adaptation-related responses: A systematic global review. 2021. *One Earth,* 4(10), 1454-1467, https://doi.org/10.1016/j.oneear.2021.09.001

33. Berrang-Ford L, Siders AR, Lesnikowski A, et al. 2021. A systematic global stocktake of evidence on human adaptation to climate change. *Nature Climate Change* 11, 989-1000, https://doi.org/10.1038/s41558-021-01170-y

32. Eaton W, Burnham M, **Kirchhoff CJ**, Hinrichs CC. 2021. Expert Habits of Mind: Implications for Knowledge Co-Production in Energy Transitions. *Energy Research & Social Science,* 80, https://doi.org/10.1016/j.erss.2021.102234.

31. Treuer G\*, **Kirchhoff CJ**, Mcgrath F, Lemos MC. 2021. Challenges of managing harmful algal blooms in U.S. drinking water systems. *Nature Sustainability,* 4, 958-964, https://doi.org/10.1017/S1742170521000090.

30. Calder Ryan SD, Grady Caitlin, Jeuland Marc, **Kirchhoff CJ**, Hale Rebecca L, Muenich Rebecca L. 2021. COVID-19 reveals vulnerabilities of the food-energy-water nexus to viral pandemics. *Environmental Science & Technology letters,* 8(8), 606-615, https://doi.org/10.1021/acs.estlett.1c00291

29. McOmber C\*, Zhuang Y, Raudales R, Vadas T, **Kirchhoff CJ**. 2021. What is recycled water, anyway? Investigating greenhouse grower definitions, perceptions, and willingness to use recycled water. *Renewable Agriculture and Food Systems,* 1-10. DOI: 10.1017/S1742170521000090.

28. Scavia D, Wang YC, Obenour DR, Apostel A, Basile SJ, Kalcic MM, **Kirchhoff CJ**, Miralha L, Muenich RL, Steiner AL. 2021. Quantifying uncertainty cascading from climate, watershed, and lake models in harmful algal bloom predictions. *Science of the Total Environment.* Mar 10, 759:143487. doi: 10.1016/j.scitotenv.2020.143487

27. Miralha L, Muenich R, Scavia D, Wells K, Steiner AL, Kalcic M, Apostel A, Basile SJ, **Kirchhoff CJ**. 2021. Bias correction of climate model outputs influences watershed model nutrient load predictions. *Science of the Total Environment.* Mar 10, 759:143039. DOI: 10.1016/j.scitotenv.2020.143039

**2020**

26. Lemos MC, Klenk NL, **Kirchhoff CJ,** Morrison T, Bremer SR, Fischer AP, Soares MB, Torres R, Olwoch JM. 2020. Grand challenges for Climate Risk Management. *Frontiers in Climate*, 2:605206. doi: 10.3389/fclim.2020.605206

25. Mullin CA, **Kirchhoff CJ**, Wang G, Vlahos P. 2020. Future projections of water temperature and thermal stability in Connecticut reservoirs and possible implications for cyanobacteria. *Water Resources Research* 56(11): e2020WR027185

24. Wang G, **Kirchhoff CJ**, Seth A, Abatzoglou JT, Livneh B, Pierce DW, Fomenko L, Ding T. 2020. Projected Changes of Precipitation Characteristics Depend on Downscaling Method and Training Data: MACA vs. LOCA using the U.S. Northeast as an Example. *Journal of Hydrometeorology. DOI: 10.1175/JHM-D-19-0275.1*

23. Arnott J, **Kirchhoff CJ**, Meyer RM, Meadow AM, Bednarek AT. 2020. Sponsoring actionable science: What public science funders can do to advance sustainability and the social contract for science. *Current Opinion in Environmental Sustainability* 43: 38-44. <https://doi.org/10.1016/j.cosust.2020.01.006>

**2019**

22. Kalcic M, Muenich R, Basile S\*, Steiner A, **Kirchhoff CJ**, Scavia D. 2019. Climate change and nutrient loading: warming can counteract a wetter future. *Environmental Science & Technology.* doi.org/10.1021/acs.est.9b01274

21. **Kirchhoff CJ**, Barlow M, Barsugli J, Galford GL, Karmalkar A, Seth A, Stephenson S, Wang G, Frank A\*\*. 2019.Local assessments for climate adaptation. *Bulletin of the American Meteorological Society* November: 2147-2152. https://doi.org/10.1175/BAMS-D-18-0138.1

20. Lemos MC, Wolske K, Vang Rasmussen L, Arnott J, Kalcic M, **Kirchhoff CJ**. 2019. The closer, the better? Untangling Scientist–Practitioner Engagement, Interaction, and Knowledge Use. *Weather, Climate, and Society* 11(3), 535-548.

19.Bair LS, Yackulic CB, Schmidt JC, Perry DM, **Kirchhoff CJ** Chief K, Colombi B. 2019. Incorporating social-ecological considerations into basin-wide responses to climate change in the Colorado River Basin. *Current Opinion in Environmental Sustainability,* 37, 14-19.

18.**Kirchhoff CJ**, Watson P. 2019. Are wastewater systems adapting to climate change? *Journal of the American Water Resources Association,* 55(4), 869-880. https://doi.org/10.1111/1752-1688.12748

17.**Kirchhoff CJ**, Flagg J\*, Zhuang Y, Utemuratov B. 2019. Understanding and Improving Enforcement and Compliance with Drinking Water Standards. *Water Resources Management,* 33(5), 1647-1663.

16.Mullin C, **Kirchhoff CJ**. 2019. Marshalling Adaptive Capacities within an Adaptive Management Framework to Enhance the Resiliency of Wastewater Systems. *Journal of the American Water Resources Association,* 55(4), 906-919. https://doi.org/10.1111/1752-1688.12709

**2018**

15. Flagg JA\*, **Kirchhoff CJ**. 2018. Context matters: Context-related drivers of and barriers to climate information use. *Climate Risk Management*, 20, 1–10. https://doi.org/https://doi.org/10.1016/j.crm.2018.01.003

**2017**

14. Vang Rasmussen L, **Kirchhoff CJ**, Lemos MC. 2017. Adaptation by Stealth: understanding climate information use across scales and decision spaces in water management in the United States, *Climatic Change,* 140(3), 451-465.doi:10.1007/s10584-016-1857-0.

**2016**

13. **Kirchhoff CJ**, Lara-Valencia F, Brugger J, Mussetta P, Pineda-Pablos N. 2016. Towards joint consideration of adaptive capacity and water security: Lessons from the arid Americas, *Current Opinion in Environmental Sustainability,* 21, 22-28*.*

12.Kalcic M, **Kirchhoff CJ**, Bosch N, Muenich R, Murray M, Gardner J\*\*, Scavia D. 2016. Engaging Stakeholders to Define Feasible and Desirable Agricultural Conservation in Western Lake Erie Watersheds. *Environmental Science & Technology,* 50(15), 8135-8145.

11. **Kirchhoff CJ**, Dilling L. 2016. The role of U.S. states in facilitating effective water governance under stress and change, *Water Resources Research*, 52(4), 2951-2964. doi:10.1002/2015WR018431. Highlighted in EOS Research Spotlight, <https://eos.org/research-spotlights/u-s-states-prepared-manage-water-changing-climate>.

**2015**

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**2014**

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**2013**

5. **Kirchhoff CJ**, Lemos MC, Dessai S. 2013. Actionable knowledge for environmental decision making: Broadening the usability of climate science. *Annu. Rev. Environ. Resour.* 38, 3.1-3.22. DOI: 10.1146/annurev-environ-022112-112828.

4. **Kirchhoff CJ.** 2013. Understanding and enhancing climate information use in water management. *Climatic* *Change* 119, 495-509.

**2012**

3. **Kirchhoff CJ**, Lemos MC, Engle N. 2012. What influences climate information use in water management? The role of boundary organizations and governance regimes in Brazil and the U.S. *Environmental Science and Policy* 26, 6-18.

2. Lemos MC, **Kirchhoff CJ**, Ramprasad V. 2012. Narrowing the usability gap. *Nature Climate Change* 2, 789-794.

1. McNeeley SM, Tessendorf SA, Lazurus H, Heikkila T, Ferguson IM, Arrigo JS, Attari SZ, Cianfrani CM, Dilling L, Gurdak JJ, Kampf SK, Kauneckis D, **Kirchhoff CJ**, Lee J, Lintner BR, Mahoney KM, Opitz-Stapleton S, Ray P, South AB, Stubblefield AP, Brugger J. 2012. Catalyzing Frontiers in Water-Climate-Society Research: A View from Early Career Scientists and Junior Faculty. *Bulletin of the American Meteorological Society* 93(4), 477-484.

**Book Chapters, Reports, and Conference Papers**

1. Joe, E.T., Koneru, S., Kirchhoff, C.J. 2024. Assessing the Effectiveness of GPT-4o in Climate Change Evidence Synthesis and Systematic Assessments: Preliminary Insights. ACL 2024 Workshop Climate NLP. <https://openreview.net/forum?id=ZcMeHsJg3c>
2. Contributor, Report on Public Infrastructure for Effective Climate Mitigation and Adaptation: A Workshop, May 20 & 29, 2024. National Academies of Science, Engineering and Medicine, Division of Behavioral And Social Sciences and Education, Board on Environmental Change and Society. Available at: <https://www.nationalacademies.org/event/42765_05-2024_public-infrastructure-for-effective-climate-mitigation-and-adaptation-a-workshop-day-1>
3. Dodman, D., B. Hayward, M. Pelling, V. Castan Broto, W. Chow, E. Chu, R. Dawson, L. Khirfan, T. McPhearson, A. Prakash, Y. Zheng, and G. Ziervogel, 2022: Cities, Settlements and Key Infrastructure. In: Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 907–1040, doi:10.1017/9781009325844.008.
4. Lemos MC, **Kirchhoff CJ**. 2020. “Boundary Organizations.” In Jean-Frédéric Morin and Amandine Orsini (Eds) *Global Environmental Politics: Understanding the Governance of the Earth*, Oxford.
5. Seth A, Wang G, **Kirchhoff CJ**, Stephenson S, Lombardo K, Ahnya R, Wu J. 2019. Connecticut Physical Climate Science Assessment Report (PCSAR). Observed trends and projections of temperature and precipitation. Available at: <https://circa.uconn.edu/wp-content/uploads/sites/1618/2019/08/CTPCSAR-Aug2019.pdf>
6. **Kirchhoff CJ**, Burnicki A, Cifuentes A. 2019. Flood Recurrence Analysis for Milford, CT.
7. **Kirchhoff CJ**, Mullin CA, Utemuratov B, Tashev A. 2019. Wastewater System Resilience: Learning from Connecticut Wastewater Systems.
8. **Kirchhoff CJ**,Arnott JC, Katzenberger JW, McNie EC. 2019. Special Report: Science policy strategies & tactics to narrow the knowledge-action gap for infrastructure and other 21st century societal challenges Prepared as a Special Report for the National Science Foundation’s Science of Science and Innovation Policy (SciSIP) Program through support of NSF Grant #1735848
9. Lemos MC, **Kirchhoff CJ.** 2015. “Climate information and water management: building adaptive capacity or business as usual?” in Ken Conca and Erika Weinthal (Eds) *The Oxford Handbook of Water Politics and Policy*, Oxford University Press.
10. Lemos MC, **Kirchhoff CJ**. 2015. “Boundary Organizations.” In Jean-Frédéric Morin and Amandine Orsini (Eds) *Essential Concepts of Global Environmental Governance*, Routledge.

**Popular Press**

McOmber C\*, **Kirchhoff CJ**. Nov. 29, 2021. Recycled water can boost sustainable agriculture if we get over the yuck factor. Available at: https://www.washingtonpost.com/politics/2021/11/29/recycled-water-can-boost-sustainable-agriculture-if-we-get-over-yuck-factor/

**PRESENTATIONS**

**Invited Presentations for the Public**

Panelist, Widening the Lens: Photography, Ecology, and the Contemporary Landscape, 2024

Carnegie Museum of Art, June 29.

Panelist, Adapting for Climate Futures, Grace Farms, Design for Freedom Summit, March 26. 2024

Panelist, Investing in Infrastructure: Promising Practices for Evidence-Informed and Equity- 2022

Focused Spending, sponsored by PEW Charitable Trust’s for the Office of Science and

Technology Policy, August 31.

Panelist, UConn Science Salon, *Climate Changing Connecticut,* Nov. 12 2015

Adult Learning Program Class (FSS-10), *Is Water the New Oil?*, 2015

~70 adult learners, Seabury Heritage Hall, Bloomfield, CT, October 29

**Invited Research Presentations and Workshops (Selected)**

Panelist, Time to move adaptation from a project-based to a boundary organization-based 2024

approach: Hybrid Workshop June 6 in Bonn, organized by Ouranos – Consortium of

Climate Change, June 6.

Panelist, Actionable Knowledge Webinar and Workshop, Global Council for Science and 2023

the Environment, September

Speaker, PSU Science Policy Symposium, March 15. 2022

Speaker, Improving Small Municipal WWTP Compliance: A National Symposium, United 2022

States Environmental Protection Agency, Oct. 25-27.

Speaker US-RHP Affinity Group Meeting, Learning from Science of Science and Decision- 2021

Making and Water Governance Research, December 1.

Carnegie Mellon University, Civil & Environmental Engineering Seminar Series, Humanizing 2021

Engineering and Resilience, November 12.

Penn State University, SAFES Water Insights Seminar, Actionable knowledge production and 2021

improved governance to address water challenges, Oct. 26.

Arizona State University Environmental Engineering Seminar Series, Are Water & Wastewater 2020

Systems Resilient to Climate Change?, November 3.

Penn State University, USDA Water for Agriculture Seminar Series, The Theory and Practice of 2020

Engaged Knowledge Co-production, September 16.

Northeast Regional Climate Center’s virtual workshop on Climate & Weather Information for 2020

New England Water Utilities & Stormwater Managers, July 30.

Panelist, NSF Advisory Committee for Environmental Research and Education Coproduction 2019

Mini-Symposium, November 4-5.

Consortium for Climate Risk in the Urban Northeast Seminar Series, *Human Dimensions of Water* 2019

*Infrastructure Resilience*, October 3.

NEIWPCC/DEEP Workshop: Oct. 11, 2017, May 1, 2019, June 11, 2019; Extreme Weather in 2019

the Forecast: Is your Facility Prepared?

Panelist, 2018 Creating a Resilient Connecticut: A CIRCA Forum on Science, Planning, Policy & 2018

Law, May 11.

Distinguished Scholar Lecture, *Climate-Resilient Water Governance & Management: Progress and* 2017

*Challenges*, University of Florida Water Institute, March 17.

New England Interstate Water Pollution Control Commission, Resiliency Training for Wastewater System Operators, 2017, May 2019, June 2019

Eastern Region Water Utilities Coordinating Committee, March 8, 2017 presentation on DPH Drinking Water Vulnerability Assessment and Resilience Plan

Connecticut Department of Energy and Environmental Protection, Aug. 18, 2016 presentation on wastewater resilience posted on DEEP’s website at http://www.ct.gov/deep/lib/deep/water/municipal\_ wastewater/wastewaterresiliencepresentation0816-deep.pdf

**Conference Presentations (within past 5 years)**

Postdoc\*; Graduate Student; Undergraduate Student\*\*

*Understanding Transformation & Resilience in Socio-Technical Systems: An Event History Study of* 4/2024

*Wastewater Management.* Bizer, MA, Segal JL, Patenaude, WL, Kirchhoff CJ. 2024.

Innovations in Climate Resilience. Washington DC. 22-24 April.

*The Plan for a GEWEX Regional Hydroclimate Project for the Contiguous United States.* Schneider, 12/2023

T., Oevelen, P., Tessendorf, S.A., Basara, J.B., Bosilovich, M.G., Feldman, D.,

Ferguson, C.R., Gettelman, A., He, C., Hughes, M., **Kirchhoff, C.J**., McCrary, R.R.,

Nesbitt, S.W., Tachera, D., Thomas, N.P. AGU, Dec. 11-15.

*Exploring the Nexus of Land Use, Climate, and Water Management: A Case Study of Paraguay's* 12/2023

*Development and Vulnerability.* Torhan, S., Nasich, M.R.S, Almada, M.A., VanMeter,

K.J., **Kirchhoff, C.J.** AGU, Dec. 11-15.

*Broadening Resilience: An evaluation of policy and planning for drinking water resilience in 100 US cities .* 12/2023

Hughes, S., **Kirchhoff, C.J.,** Rauh, E., McOmber, C.\*, Friedman, M., Manshardt, D.,

Prout, J. AGU, Dec. 11-15.

*Transforming wastewater systems for resilience.* McOmber, C.\*, **Kirchhoff, CJ**, Bizer, M. AGU, 12/2023

Dec. 11-15.

*Understanding Competing Pressures in Academic Culture.* Wheeler, D.C., Giddings, S.N., 12/2023

Pedersen, D., **Kirchhoff, CJ.** AGU, Dec. 11-15.

*Understanding transformative governance and the mechanisms for improved resilience outcomes in US* 10/2023

*wastewater systems.* McOmber, C.\* **Kirchhoff, CJ.** 2023 Radboud Conference on

Earth System Governance, Oct. 24-26.

*The Role of “Knowledge” in Water Quality Governance.* Joe, ET. **Kirchhoff, CJ.** 2023 Radboud 10/2023

Conference on Earth System Governance, Oct. 24-26.

*Driving the Cost of Water: Analysis of Drinking Water Costs in U.S. Municipalities.* Hughes S., 4/2023

**Kirchhoff CJ**, Switzer D, Lee M. Urban Affairs Association Annual Meeting,

April 26-29

*Bridging the Innovation Deficit to Advance Climate Resilience and Adaptation in the Wastewater Sector.* 10/2021

Bizer M., Michaud L., McOmber C.\*, **Kirchhoff C.J.**. Presented at the 15th

annual Graduate Climate Conference (GCC) (virtual), October 29-31.

*The Role of U.S. States in Wastewater Innovation.* Michaud L., Bizer M., McOmber C.\*, 3/2021

**Kirchhoff C.J.** Presented at Connecticut Conference on Natural Resources:

Creating a More Equitable & Inclusive Environmental Sector, March 15.

*Energy Justice and Wastewater: Evaluating the distribution of renewable energy in publicly owned treatment* 9/2021

*works.* Michaud L., **Kirchhoff C.J.,** Strazzabosco A., Chraim L.\*\* 2021. Presented

at the 2nd World Forum on Climate Justice Glasgow (virtual), September 21-23*.*

*Understanding and Improving Resilience of Built Infrastructure: A Focus on Wastewater* at the 2nd Annual 6/2019

New England Council of Public Utility Commissioners Symposium, Hartford, CT,

June 2-4.

F*our Types of Resilience Capacity: Assessing Climate Resilience in Connecticut Drinking Water Systems* at 4/2019

the National Adaptation Forum, Madison, Wisconsin, April 23-25, 2019

**TEACHING**

**Professional Development**

PSU COE, Faculty Development Workshop, Happy Valley Improv 2024

Faculty Workshop Series on Engineering Graduate Student Mentorship, Re-Envisioning 2023

Graduate Engineering Student Thriving, Mentoring, and Research Advising through

the Lenses of Threshold Concepts and Early Wins, April 20, 2023; Leveraging Team

Expectations Charters, Individualized Development Plans, and Goals Worksheets to

Mentor Engineering Graduate Students, April 27

Best Practices for Postdoctoral Mentors and Mentees, Organized by Director of 2023

Postdoctoral Affairs, PSU, April 27

Safer People Safer Places Workshop, PSU 2022

The Safer People Safer Places network seeks to create a safer and more inclusive environment for sexual and gender diversity. The network is a campus-wide program designed to raise visibility about the LGBTQ+ population, increase the understanding of issues facing LGBTQ+ students, faculty, and staff, and raise the awareness of the various LGBTQ+ resources available across Penn State.

American Society for Engineering Education (ASEE), APA-ENG, Networking, Ideation, and

Collaboration Workshop for Engineering Faculty Authors, April 20-22, 2022

APA-ENG aims to increase the capacity of engineering faculty to produce competitive manuscripts for refereed journals and other publications in the area of the Scholarship of Teaching and Learning (SoTL).

Faculty Fellow, Graduate Student Well-Being, Student Health and Well-Being (SHAW), 2022

Seminar Series for Engineering Faculty, University of Connecticut, March – April

The purpose of the seminar series was to identify practices and approaches that promote graduate student learning, wellbeing, and inclusion, to implement strategies and reflect on their utility and impact; assess effectiveness and sustainability of those practices and approaches; develop toolkit for broader adoption and dissemination; and create a community of practice among engineering faculty.

**Invited Lectures and Panels on Teaching, Mentoring, and Diversity, Equity, and Inclusion**

Panelist, LEAP into Research Faculty Panel, July 16 2024

Panelist, Professional Development Panel Discussion, PSU Water Conference, March 14 2024

To provide insights into career options and potential pathways for reaching career goals

highlighting academic, non-academic, domestic, and international careers.

Panelist, Game Changers Academy, May 16 2023

Panelist, PSU Society of Women Engineers, Professor Research Panel, January 2023

**Courses Taught at Penn State University**

CE 360 Fluid Mechanics (Spring term) 2024

LPE 853: Engineering, Law, and Policy Systems (Fall term) 2022

**Courses Taught at the University of Connecticut (2012 – 2022)**

CE 2251 Probability and Statistics for Engineers (U)

ENVE 1000E Environmental Sustainability (U)

ENVE 4850/5850 Sustainable Resilient Water Governance

ENVE 5090 Water Resources Policy & Management (G/U)

ENVE 5020 Qualitative Methods: Interviewing (G)

ENVE 5020 Survey Design and Analysis (G)

**PROFESSIONAL LEADERSHIP AND SERVICE**

**Penn State**

**University-Level**

Graduate Council

Chair, Graduate Council Research, Scholarship, and Creative Activity Committee 2024-2025

Appointed Member 2023-2026

Appointed Alternate Member 2023-2024

Appointed Member, Ad-Hoc Committee on Graduate Faculty Status 2023-2024

Member, Faculty Advisory Board, Penn State Climate Consortium 2023-present

Chair, Penn State Institute for Energy and the Environment, Diversity, Equity, Inclusion 2023-present

and Belonging Committee

Penn State Initiative for Faculty Success and Equity

Planning Committee Member 2023-2024

Faculty Advisor, Science Policy Society 2022-present

**College Level**

Member, Sabbatical Leave Application Review Committee 2024 – 2026

Member, COE FEIC 2024 - present

Member, COE Sustainability Council

Representing CEE 2024-present

Representing SEDI 2023-present

**School/Department Level**

Associate Director LPE 2022-present

DGS, MELP 2023-present

Chair, CEE Diversity, Equity, Inclusion and Belonging Committee 2023-2024

SEDI, Promotion and Tenure Committee

Chair 2024-2025

Member 2022-2023

**Other Committees**

Member, External Advisory Board, ASPECT, a Horizon Europe Research and 2024-2027

Innovation Action project that will produce and improve seamless climate

predictions covering the next 30 years to facilitate adaptation decisions in a

range of sectors.

Member, External Review Committee, for the 5 yr Review of the South-Central Climate 2024

Adaptation Science Center

Member, Science and Technical Advisory Committee, Chesapeake Bay Program 2023 – 2025

Chair, Human Dimensions Working Group, US-RHP 2022-present

Science Advisor, *EoS* 2020 – 2022

Member, Governor’s Climate Change Task Force, Adaptation Planning and 2020 - 2021

Implementation Working Group

Advisory Member, Long Island Sound Blue Plan 2017 – 2022

Member, Independent External Review Team (IERT) for the NOAA Center for Earth 2019 - 2020

System Sciences and Remote Sensing Technologies

Member, External Research Advisory Panel, the Connecticut Sea Grant College Program 2016-2018 Omnibus Funding Cycle Strategic Review Process

Member, Water Planning Council Advisory Group, Workgroup on Other State Plans 2014-2015

for the State of Connecticut Water Planning process.

Member, Long Island Sound Study Science and Technical Advisory Committee 2013-2021

**Editorial**

Associate Editor, *Bulletin of the American Meteorological Society* 2020 - present

Associate Editor, *Frontiers in Climate, Climate Risk Management* 2019 – present

Associate Editor, *Journal of the American Water Resources Association* 2018 – 2022

Special Issue Managing Guest Editor, *Environmental Science & Policy* 2019 – 2020

Special Issue Managing Guest Editor, *Climate Risk Management* 2013-2014

Special Issue Guest Editor, *Journal of the American Water Resources Association* 2018

**Peer Review**

Manuscript Peer Review: Global Environmental Change; Climate Risk Management; Bulletin of the American Meteorological Society, Environment, Systems and Decisions; Environmental Studies and Sciences; Weather, Climate, and Society; Ecology and Society; Society & Natural Resource; Journal of the American Water Resources Association; Science Technology & Human Values; Journal of Water Resources Planning and Management; Climate Services; Water Resources Research; Environmental Science & Policy; Wires Climate Change; Nature Sustainability; Nature Communications

Proposal Peer Review: National Science Foundation; National Estuarine Research Reserve System Science Collaborative; New Jersey Sea Grant Consortium; National Oceanic and Atmospheric Administration; Great Lakes Integrated Sciences + Assessment Climate Assessment Grant proposals; California Sea Grant

National Academies Report Peer Review:

Reviewer for Developing a Strategy to Evaluate the National Climate Assessment 2024

Consensus Report from the National Academies Board on Atmospheric

Sciences and Climate

Reviewer for the Review of the US Global Change Program’s Draft Decadal 2022

Strategic Plan, 2022-2031

Reviewer for the Review Draft of the Transforming EPA Science to Meet 2022

Today’s and tomorrow's Challenges Consensus Study Report from the

National Academies Board on Environmental Studies and Toxicology

**Professional Societies**

American Geophysical Union

Deputy Chair, Water and Society Technical Committee 2024-present

Member, Water and Society Technical Committee 2016-present

Society for the Social Studies of Science (4S)

Liaison, International Network for Engineering Studies (INES) 2021 – 2024

Member 2018 - present

Association for Environmental Studies and Sciences (AESS)

Nominations Committee Member 2022-2024

American Society of Civil Engineers (ASCE) 1998 - present

**POSTDOC, GRADUATE AND UNDERGRADUATE MENTORING**

**Postdoctoral Trainees (next position)**

PSU

Matthew Barrett, PhD 2024 – present

Irma Wang, PhD 2024 – present

Hadi Veisi, PhD (faculty, University of Wisconsin, Stevens Point) 2023 – 2024

Chesney McOmber, PhD (faculty, Keene State) 2020 - 2023

UCONN

Cristina Mullin, PhD (USEPA) 2019 – 2020

Galen Treuer, PhD (Miami-Dade County) 2017 – 2019

Julia Flagg, PhD (faculty, Connecticut College) 2016

**Doctoral Student, Primary Advisor (next position)**

Bhavik Gupta, PSU 2023 – present

Elphin Joe, PSU 2021 – present

Sarah Torhan, PSU 2021 – present

Matthew Bizer, UCONN 2020 – present

Davis Manshardt, UCONN 2021 – present

Cristina Mullin, Ph.D., UCONN (postdoc/USEPA) 2016 - 2019

**PSU Law Student Research Advising**

Erica Uebelhor 2024

Erik Allgood 2024

**Masters Student, Primary Advisor (next position)**

Lilian Michaud (UCONN, MS) 2020 - 2022

Peter Watson (UCONN, MS) 2015 - 2017

**Doctoral and Masters Student, Committee Member**

Dana Sjostrom, University of Memphis (Doctoral) 2023 – present

Kalra Marali, PSU (Doctoral) 2022 - present

Duncan Wheeler, Scripps Institute of Oceanography (Doctoral) 2024

Rouhangiz Yavari Bajehbaj (Nasim Yavari), PSU (Doctoral) 2024

Julia Czarnecki, UCONN (Doctoral) 2024

Sardorbek Musayev, UCONN (Doctoral) 2022

Tara Walsh, UCONN (Doctoral) 2020

Samantha Basile, University of Michigan (Doctoral) 2019

Dana Parr, UCONN (Doctoral) 2015

Amanda Guzman, PSU (Masters) 2023

Tengyu Ding, Brandon Holland, UCONN (Masters) 2019

**Undergraduate Students Advised/Mentored**

PSU

Lisa Wang, PSU 2023-2024

UCONN

Christopher Gill, Honors Thesis, UCONN 2017

Brianna Church, Honors Thesis, UCONN 2016

Adini Chonweerawong, Jonathan Lebo, Payton Howard, David Winslow 2021 - 2022

Conner Caridad, Benjamin Gardiner, Benjamin Albee, Tanushree Biswas, Kaiwen Fu, 2022

Landon Silbert, UCONN

Susan Chen, Pavan Adapa, Crina Gutu, Citlalli Rojas UCONN 2021

Alexis Meservey, Samantha Paglia, and Adam Glendening, UCONN 2020 – 2021

Hope Dymond, Reginald Denny, UCONN 2019 – 2020

Tim Cannata, UCONN 2017 - 2020

Austin Frank, UCONN 2018 – 2019

Joshua Crittendon (minority), Bridget Burke, Carley Carbo, Katharine Katrichis, UCONN 2017

Brian Tang, Alyssa Carroll, and William Grant, UCONN 2015-2016

Caroline Rando and Jonathan Bossi, UCONN 2014-2015

**PRINT, BROADCAST, AND PODCAST MEDIA INTERVIEWS**

Print Media

Interviewed by

Interviewed by Ethan Freedman, science journalist, for **Slate,** July 2024

Article about Paris Olympics, Seine River, Combined Sewers, water quality

Interviewed by Scott Vance, science reporter for **Washington Post,** June2024

Story about infrastructure, particularly dams and climate change, available at:

https://www.washingtonpost.com/weather/2024/06/29/rapidan-dam-floods-

extreme-rains-infrastructure/

Interviewed by Alissa Greenberg, published in **National Geographic**, July 2023

"Here's what worries engineers the most about U.S. infrastructure, [www.nationalgeographic.com/environment/article/most-dangerous-infrastructure-problems](https://www.nationalgeographic.com/environment/article/most-dangerous-infrastructure-problems)

Interviewed by Heather Goss, Editor-in-Chief, **Eos**. *Knowledge Brings Us Together* 102. 2021

DOI: 10.1029/2021EO210596.

Interviewed by María Paula Rubiano, Environmental Justice Fellow, Grist, September 2021

Story about the resilience of water systems in the Gulf Coast, available at:

[grist.org/equity/ida-left-behind-a-water-crisis-in-the-gulf/](https://grist.org/equity/ida-left-behind-a-water-crisis-in-the-gulf/)

Interviewed by environmental journalist Dinah Voyles Pulver, **USA Today**, December 2021

“'We need giant steps': Experts on Impacts of extreme rainfall, drought"[, available at: www.usatoday.com/story/news/2021/12/02/experts-rainfall-climate-change/8590489002/](https://www.usatoday.com/story/news/2021/12/02/experts-rainfall-climate-change/8590489002/)

Hartford Magazine, Resilience Players, Feb. 20 2019

TV Broadcast/Radio

Interviewed by reporter Rachel McDevitt for **StateImpact Pennsylvania - WITF,** 2024

**WHYY and the Allegheny Front,** “Heaviest Pa. storms drop 60% more rain than

they used to, report says.” Available at: https://stateimpact.npr.org/pennsylvania/2024/05/16/heaviest-pa-storms-drop-60-more-rain-than-they-used-to-report-says/

Interviewed by Dan Corcoran, anchor **NBC News CT 7pm News**, August2021

Story about the state of our stormwater infrastructure. Available at: ​[www.nbcconnecticut.com/news/local/qa-how-can-we-adapt-our-infrastructure-for-future-severe-weather/2575343/](https://www.nbcconnecticut.com/news/local/qa-how-can-we-adapt-our-infrastructure-for-future-severe-weather/2575343/)

Interviewed by Tegan Wendland and Austin Ramsey for **National** **NPR** story “Known 2021

for its floods, Louisiana is running dangerously short of groundwater.” Read the story here: [www.npr.org/2021/03/19/975689866/known-for-its-floods-louisiana-is-running-dangerously-short-of-groundwater](https://www.npr.org/2021/03/19/975689866/known-for-its-floods-louisiana-is-running-dangerously-short-of-groundwater)

Interviewed by Brian Gimmett for **NPR** story on drinking water. Read his story 2019 here: [www.kmuw.org/post/environmental-group-says-almost-all-kansas-tap-water-too-contaminated](https://www.kmuw.org/post/environmental-group-says-almost-all-kansas-tap-water-too-contaminated)

Podcast

Growing Impact: Solar powered water treatment. Podcast by the Institute of Energy 2023

and the Environment. Available at, <https://iee.psu.edu/news/podcast/growing-impact-solar-powered-water-treatment>

How are wastewater systems adapting to climate change? Podcast by the Environmental 2023

Finance Center Network. Recorded Oct. Available at, <https://open.spotify.com/episode/6EjmsfNAKyPK236KnVBhSu?si=90cb2ccba28b4a08&nd=1&dlsi=a2e8c1efe2004570>