

ASU grad takes interdisciplinary water research to Princeton, then NYU

By Laura Randall, ASU News
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Editor's note: This story is part of a series of profiles of notable [spring 2025 graduates](#).

With a curious mind, Adam Wiechman reached beyond the boundaries of traditionally siloed academic principles. As a strong math student, he knew he had an engineering mind, but was inspired early on in his academic career to make a difference through community-engaged research.

“(A) student who thinks like an engineer but wants to talk about politics and society,” Wiechman called himself.

He first pursued a dual bachelor’s degree in environmental engineering and political science to create an interdisciplinary path into environmental policy work for himself.

Now, Wiechman is graduating with a PhD in sustainability, with a focus on complex adaptive systems science, from the [School of Sustainability](#) and is being recognized as the [College of Global Futures](#)’ Outstanding Graduate Student for spring 2025.

Soon, he will begin new research projects and collaborations at [Princeton University's High Meadows Environmental Institute](#) as a postdoctoral research associate. After a year of further refining and advancing his research, Wiechman will become an assistant professor of public service in the [Robert F. Wagner School of Public Service at New York University](#).

“Before (the School of Sustainability), I was told to ‘pick a lane’ between my engineering and political science interests, but I held that the problems I wished to address required a ‘multi-lane’ approach,” Wiechman said. “In (sustainability), I did not need to justify this, and instead, I freely navigated the perspectives necessary to understand the politics of infrastructure investment and its relationship to sustainability.”

At the beginning of his graduate program, Wiechman was selected for the NSF Graduate Research Fellowship Program. This prestigious program was instrumental in allowing him to

pursue his research on water infrastructure systems, the institutions that are responsible for them and how these critical systems respond to change and serve our communities.

“I view my research as one of many perspectives that can inform how we invest in the world we want to have,” Wiechman says.

Even with his achievements and success early in his research career, Wiechman has found the true value of graduate school in the community of faculty and students.

“During my Zoom-based first year, I realized that the benefits of academic life come, not from the hours of reading alone, but the vibrant discussions and serendipity of being immersed in a supporting community of peers and mentors,” Wiechman says.

In reciprocity, Wiechman devoted time and energy to give back to and support his community as they supported him. During his time at ASU, he has led a peer writing support group, served as a representative in the Graduate and Professional Students Association and as a graduate representative in the School of Sustainability. While serving as a School of Sustainability graduate representative, he worked on the Week1 initiative, which supported international students with their transition into graduate school life in Arizona.

(Video: {<https://youtu.be/VaQSa9KqLCc?si=QBCnQtMQnGo8fqLS>})

Question: Why did you choose ASU?

Answer: Being the weird engineer who wanted to think about politics, I was immediately drawn to ASU and its commitment to innovative scholarship that is not afraid to break traditional academic boundaries when necessary. What sealed the deal was the Center for Behavior, Institutions, and the Environment, which is a research group that continues the Ostrom tradition of studying collective action and resource governance, often with computational modeling perspectives, and the Urban Water Transitions NSF-funded project, which offered me a research assistant position.

Q: Can you tell me about your research and focus areas?

A: I study the politics of infrastructure investment or more specifically, how the design of institutions responsible for infrastructure systems affect the way infrastructure systems respond to change and serve the many kinds of users dependent on them. Just as an infrastructure system can be affected by a change in rainfall or traffic, it can be significantly affected by changes in investment, which are the outputs of complex institutional processes often left out of systems models that treat institutions as external. If we want to ensure that the infrastructure systems critical to supporting our collective wellbeing are ready for the future, our understanding has to extend beyond the physically built systems and also consider the “soft” institutional systems that invest in them.

Being in Arizona and having a prior interest in water issues from undergrad, my dissertation closely examined drinking water in Arizona cities, but I plan to expand the scope of infrastructure sectors and geographic locations in my future research.

Q: What impact do you hope to have in the long term with your work?

A: I hope to be a respected source of knowledge in the design of institutions responsible for critical infrastructure across multiple sectors. While I will be building a career in academia, I plan to seek out collaborations with policymakers and advocates on the ground to ensure that my scholarship has a strong footing in reality. Beyond infrastructure, I hope that my work serves as a valuable counter perspective to the growing technological and social fascination with large difficult-to-interpret predictive models that do not help us understand why we should make certain strategic planning or investment decisions in an uncertain world. I do not want my work to be a crystal ball but a conversation prompt.

Q: What's something you learned while at ASU — in the classroom or otherwise — that surprised you or changed your perspective?

A: During my first year, I took a class on resilience theory. In the middle of a deep discussion on the proper definition of “resilience,” the professor pointed out that regardless of the “right” definition, the word has been so widely used in pop culture and politics that we cannot just assume everyone is heeding the “right” definition. This was one moment that I consistently refer to when reminding myself that universities and academic perspectives are only one knowledge source in the broad conversation about truth in our society.

Q: What's the best piece of advice you'd give to those still in school?

A: Do what you can to get involved in an activity outside of school, preferably with people mostly not in school. Especially for students in research-driven or highly academic programs, we can get sucked into the academic bubble and forget about the world beyond it. Getting outside the bubble is critical to grounding your work in its contribution to the world, checking the reality of assumptions we make, and reminding yourself that there is more to life than research.

Q: If someone gave you \$40 million to solve one problem on our planet, what would you tackle?

A: I don't think \$40 million is enough for this, but I would want to use it to solve the problem of distrust in our society. In my mind, the collective action required to solve any other issue we care about depends on our ability to trust one another, despite multiple technological, economic, environmental and cultural forces that work against it. From small families to entire nations, all human organizations live and die as a function of trust.

This story originally appeared on [ASU News](#).

Main image



Caption: Adam Wiechman presents his research on sustainable models for the governance of drinking water infrastructure in Arizona. Photo courtesy of Adam Wiechman

Text image(s)



Adam Wiechman