

**CFAES**

The Chicken or the Egg?: Resilient Infrastructure and Resilience Governance

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SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES

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Abstract:

The ability of infrastructure and communities to be resilient to rapid social, ecological, and technological change has been identified as a critical transdisciplinary and cross-sector challenge. Much of the research on resilience to date has focused on the following key themes: (a) characterization of social, ecological or technological system dynamics that create vulnerabilities to stresses and shocks; (b) creation of models to project or simulate changes in infrastructure design that might enhance the resilience of social, ecological, or technological systems; or, (c) the analysis of the governance, planning and policy challenges related to resilience. Emerging from this work, researchers and practitioners have concluded that the necessary infrastructure design changes are not possible without first changing governance arrangements. Not only has our infrastructure been physically designed for a climate that no longer exists, so too have our governance structures. It is only through re-thinking governance regimes that we can “open-up” transformative pathways for more resilient infrastructure designs. How, then, can researchers, practitioners, and communities collaborate to “open-up” these pathways? We argue that there is a need to co-produce research and practice that is built on a foundation of trusted partnerships focused on long-term collaborations and shared outcomes. Integrating literature in resilience governance and infrastructure and utilizing case studies of co-production in the US, this presentation explores how co-production strategies and interventions can generate novel approaches to resilience governance that then enable more resilient infrastructure design choices.

Short bio:

Thaddeus R. Miller is an Associate Professor in the new School of Public Policy at the University of Massachusetts Amherst. His work explores how science, technology, and policy can be utilized to foster transitions to sustainability and support more resilient infrastructure. He collaborates with interdisciplinary teams of researchers and practitioners to enable cities to leverage science and technology to meet policy goals and community needs. He is on the Executive Management Team for the National Science Foundation funded Urban Resilience to Extremes Sustainability Research Network. His book, *Reconstructing Sustainability Science: Knowledge and Action for a Sustainable Future*, part of the Earthscan Routledge Science in Society Series, examines how scientists can navigate epistemic and normative tensions to link knowledge to social action. Before joining UMass, Dr. Miller was a faculty member at Arizona State University and Portland State University.

THURSDAY, MAY 5, 2022

Time: 4:10 p.m. - 5:30 p.m.

Join via Zoom: <https://osu.zoom.us/j/93275868693?pwd=M3U3S21yL2pIV1VhZWlEdG1lejF1QT09>

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