

SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES

## **GRADUATE EXIT SEMINAR**

## HARRISON FRIED

## Theorizing conditions and incentives that lead actors to develop resilient management strategies in complex environmental governance settings.



Modern environmental problems pose unique management challenges since they are usually interdependent in myriad, complex ways. Climate change is the ultimate example of a problem that forces environmental managers to confront highly interdependent challenges, such as invasive species, rising temperatures, and habitat loss. A growing area of interest in understanding complex, polycentric governance systems has been to analyze the engagement of stakeholders in policy issues and the participation of stakeholders in policy forums. In this thesis, I focus on climate change adaptation governance in Ohio, USA as a model study system to evaluate conditions and incentives that drive actors to manage for interdependent issues or to participate in forums in ways that are collectively beneficial. To answer questions about actor management strategies in complex, polycentric governance

arrangements, I analyze climate change governance as a three-mode network of interrelations among actors, forums, and policy issues related to climate change adaption in Ohio. I draw upon the Ecology of Games Theory (EGT) and an Institutional Fitness framework to formulate hypotheses that uncover the conditions, incentive structures, and attributes that prompt actors to engage with issues and participate in forums in ways that promote adaptive capacity. Together, the findings presented in this thesis advance theoretical understanding of institutional fitness and resilience in social-ecological systems by revealing how actors navigate highly interdependent environmental governance settings. I also highlight the benefits of examining complexity in polycentric governance systems through the more nuanced approach allowed by the analysis of three-mode networks.

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FRIDAY, JUNE 18, 2021 11:00 A.M.

Join the seminar via Zoom:

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