Title: Urban Ecology: Designing the Climate-Resilient Cities of the Future

As we anticipate more extreme conditions in the coming decades, we need to transform our cities into more ecologically resilient systems. Yet the components of resilience—including green infrastructure, urban forestry, native landscaping, and other actions—are generally designed in isolation and for small areas at a time. Based on the recently-developed Landscape Resilience Framework, we are developing multi-benefit urban greening strategies that re-integrate natural ecosystems at the city scale to improve resilience for both people and native wildlife. As one example, through Re-Oaking efforts strategically planted native oaks are establishing drought-tolerant urban shade with high rates of carbon storage and support for native biodiversity.

Currently we are developing an urban biodiversity strategy to guide synergistic ecological improvements and site-specific guidance for spatially prioritizing different climate resilience benefits such as runoff reduction, carbon storage, and shade production.

Presenter: Robin Grossinger, San Francisco Estuary Institute

Robin Grossinger is a Program Director and Senior Scientist at the San Francisco Estuary Institute, where he co-directs SFEI's Resilient Landscapes program. Robin leads efforts throughout the state to reintegrate natural processes within our highly modified landscapes, creating healthier and more adaptive neighborhoods, cities, and surrounding landscapes. He advises restoration strategies for San Francisco Bay, the Sacramento-San Joaquin Delta, urban landscapes such as the Google campus, and rivers throughout California. Recently Robin has been involved in the development of SFEI's Urban Biodiversity Framework for enhancing the ecological contributions of urban greening activities.