

Mitigating the Impacts of the Urban Heat Island and Extreme Heat on Human Health in Southwestern Cities

Moderators:

Maggie Messerschmidt is Urban Conservation Program Manager for The Nature Conservancy, Arizona. As a pioneer of the Cities Program at TNC, Maggie is part of an emerging conservation program that includes 20 cities across the United States. In the Phoenix Metropolitan Area, she works to implement and scale water-smart heat reduction strategies across the urban landscape, including green stormwater practices, tree planting, and restoration of urban soils. Collaborations include partnerships with municipalities, community organizations, and ASU urban climate scientists. Maggie led participative processes for watershed management in Honduras and Peru from 2008-2011, working with national and local governments and NGOs. At Indiana University, she founded and led a research and action program, The RAIN Initiative, for green infrastructure. Maggie holds an M.S.E.S. (Environmental Science) and M.P.A. (Public Affairs) from Indiana University's School of Public and Environmental Affairs.

Nich Weller is a Ph.D. student at Arizona State University's School of Sustainability. His interests include policy, science, democracy, and design, particularly around sustainability and environmental issues. More specifically, he studies ways the general public contributes to science and policy and what decision makers do with such input. Nich works with a group of practitioners and researchers from the [Institute for the Future of Innovation in Society](#) to examine large-scale public forums exploring what people think cities should do to respond to hazards like droughts or floods. His work compares these forums to other methods of participation in decision making and science, including participatory design. In the past, Nich worked at ASU's Wetland Ecosystem Ecology Lab to study urban stormwater runoff and wetlands. More recently, he served as a fellow with the School of Sustainability's [Sustainability Science for Sustainable Schools](#) program to develop and implement sustainability curriculum and programming for local K-12 schools.

Melissa Davidson, Graduate Fellow, Urban Resilience to Extremes SRN, School of Sustainability, Arizona State University. Melissa Davidson is a research fellow with the Urban Resilience to Extremes Sustainability Research Network ([UREx SRN](#)) and a Ph.D. student in Arizona State University's School of Sustainability. Her research explores how different cities think about and plan for the future with a specific focus on scenario development and participatory modeling. Melissa works closely with Central Arizona-Phoenix Long-term Ecological Research Network's (CAP-LTER) [Sustainable Future Scenarios](#) project, which brings together diverse stakeholders from across the Phoenix Valley to explore alternative futures for the region. As a research fellow with UREx SRN, Melissa continues to engage city planners, community leaders, and researchers in cities across the U.S. to explore alternative plausible and desirable futures for their communities.

Panelists:

Paul Coseo, Senior Sustainability Scientist, Julie Ann Wrigley Global Institute of Sustainability; Assistant Professor, The Design School, Herberger Institute for Design and the Arts; Affiliated Faculty, Center for Biodiversity Outcomes, Julie Ann Wrigley Global Institute of Sustainability

Dr. Coseo examines three connected lines of research on urban ecological and climatic design, design approaches to address climate change adaptation, and social learning through design. He approaches research, teaching, and practice with a humble appreciation for how our design decisions impact the sustainability of natural and social environments. At Arizona State University (ASU), he leads a project called Cool Roofscapes, he acts as a co-lead of the Interdisciplinary

Urban Design Theme for the Central Arizona Phoenix Long Term Ecological Research Project, and serves on the leadership team for the Urban Climate Research Center. His other areas of interest include environmental negotiation, community engagement, and social justice. Dr. Coseo teaches urban ecological planning and design courses in the Landscape Architecture Program at the Design School within the Herberger Institute for Design and the Arts at ASU.

Melissa Guardaro, Graduate Fellow, Urban Resilience to Extremes SRN, School of Sustainability, Arizona State University. Melissa Guardaro is a research fellow with Urban Resilience to Extremes Sustainability Research Network (URExSRN) and a Ph.D. student at Arizona State University in the School of Sustainability. Her research focuses on urban policy and governance for the mitigation and adaptation to extreme heat and the urban heat island effects. She is currently working as the liaison between the City of Phoenix and Arizona State University researchers to help formulate a comprehensive heat reduction strategy, and with The Nature Conservancy, the Maricopa County Health Department, and other community partners to create neighborhood heat solutions that improve thermal comfort and public health outcomes, especially during extreme heat events.

Melissa most recently was the United Nations Representative for the American Association of University Women, where she advocated for gender justice in the formulation of the Sustainable Development Goals. She completed a Master's degree in Sustainability and Environmental Management from Harvard and an MBA from Columbia University.

Liza Oz-Golden, AICP, Healthy Community Design Program Coordinator, Maricopa County Department of Public Health. Liza collaborates with public health teams, local and regional government agencies, and community stakeholders to advance healthy community design. She supports evidence-based systemic approaches and best practices that improve access to healthy food, active living, and population health. She is passionate about partnering with others to incorporate heat mitigation design elements to further health equity and social justice and brings an interdisciplinary perspective shaped by her experiences in both the private and public sector.

Liza graduated from ASU with a Master of Environmental Planning (MEP). She wrote her graduate thesis about Urban Heat mitigation titled: *Increasing outdoor comfort in the Sonoran Desert: an analysis of the Haden Ferry Site, Tempe, Arizona*.

Vjollca Berisha, M.D., M.P.H., Senior Epidemiologist, Maricopa County Department of Public Health, Office of Epidemiology. Vjollca Berisha currently is a Senior Epidemiologist with the Office of Epidemiology within Division of Disease Control at the Maricopa County Department of Public Health. During her thirty-year professional career, Dr. Berisha has worked both domestically and internationally for state and local public health governments. Dr. Berisha leads a multidisciplinary team in the areas of communicable disease and environmental surveillance including heat-related illness, injury epidemiology, and respiratory diseases. The last ten years her focus has been tracking heat-associated death and illness in Maricopa County and sharing this information with stakeholders with the goal to prevent heat related injuries. Vjollca and her team have been selected to present oral and poster presentations at several professional conferences including Council of State and Territorial Epidemiologist, American Public Health Association, Infectious Disease Society of America and other professional gatherings.

Stacie Beute, Director, Central Arizona Conservation Alliance. The Central Arizona Conservation Alliance is a coalition of stakeholders committed to community engagement in the study, restoration, and promotion of the mountain park preserves in and around the Phoenix metro area. In this community-based, collaborative approach to conservation, we aim to become a model for the nation for how citizens, managers, and researchers can work together toward protection and sustainable use of large nature preserves within a densely populated urban region. Stacie's interests tend toward the intersection of biology and society—to those spaces where human action and human decision-making interface with biological systems, and where biological systems shape human life.

Tiffany Halperin, founder of The Urban Culture Design Project, is a LEED accredited urban designer and landscape architect committed to community development. Her work focuses on urban life, town cores, and is dedicated to community building on scales that range from local to regional and neighborhood to city. Her design practice acknowledges and incorporates the role and process a community's culture plays in informing the design of urban space based on the core belief that places should be designed for the individuals that occupy them. Her work seeks to affect positive change through social impact design services. Tiffany served on the Phoenix Revitalization Corporation Board for ten years, currently serves on the MAG Bicycle and Pedestrian Committee for over seven years, and is a new member of the Central Village Planning Committee in Phoenix. She has applied her expertise in urban desert plantings to complete several projects in large city cores across Arizona, including Downtown Phoenix and Downtown Scottsdale, where she created and detailed the necessary infrastructure for urban vegetation to survive. Her experience with Downtown neighborhoods led to work with the ASU grant-funded project titled Urban Vulnerability to Climate Change where she investigated vegetative installations as a strategy to urban heat mitigation.