Aurora Kagawa-Viviani

Assistant Professor

"I study what I call the 'ecohydrology of change,' hydrologic and ecologic processes shaped by plant-water interactions in shifting landscapes, waterscapes, and climates."

I joined WRRC in Fall 2022 as a joint appointee with the Department of Geography and Environment within the College of Social Sciences. My previous work focused on the forested landscapes of the Hawaiian Islands. However, serving on the Commission for Water Resource Management (2021–2025), witnessing the Red Hill crisis, and developing a rigorous and interdisciplinary undergraduate Water and Society course have collectively motivated me to pivot toward transdisciplinary work on urban systems. These days, I explore the questions of what we might learn by studying urban systems with the same intensity and tools of so-called "natural" landscapes. To accomplish this, I will use sensors and tracers to understand urban ecohydrology, and draw on interdisciplinary collaboration and participatory research approaches to enable the cultivation of more equitable urban landscapes and a more diverse community of water professionals.

EDUCATION

- SB, Environmental Engineering Science, Massachusetts Institute of Technology
- MS, Botany, University of Hawai'i at Mānoa
- PhD, Geography and Environment, University of Hawai'i at Mānoa

INTERESTS

- Ecohydrologic processes relevant to ecosystem restoration and urban systems
- Community water science ("citizen science")

CURRENT PROJECTS

- Synthesis of forest restoration across the Hawaiian Islands: Management realities and ecohydrologic implications
- Red Hill and public water literacy
- Urban ecosystems