Yale school of the environment



FELLOWSHIP BRIEF

Community-led Water Resilience in Los Angeles, CA

Ryanna Fossum, MEM '22

The Need.

Of the environmental challenges facing Southern California, deficiencies in water management and infrastructure are perhaps the most insidious. To push back on the "hard path" ethic of pumping water across the West to meet relentless demand, we need to adopt integrated, regional water management (IRWM) objectives that improve water supply and water quality and enhance open space, recreation, habitat, and flood management.

IRWM objectives understand that top-down approaches to water management too often ignore the needs of economically- and environmentally- distressed communities. The Greater Los Angeles County area includes 87 cities and more than 9.8 million residents, of which approximately 2.5 million are considered disadvantaged. Meeting the water needs of the LA region will require a departure from the traditional approach to water management and a move towards developing community-forward initiatives that meet the complex needs.



The Project.

Ryanna Fossum worked with the Council for Watershed Health (CWH) on their efforts to promote integrated regional watershed management in the greater Los Angeles region. She supported watershed coordinators with the Safe Clean Water Program, a funding initiative that captures and cleans stormwater while generating new opportunities for open space preservation. Ryanna also kicked-off a new CWH project to convene water agencies in the region to discuss the state of water recycling projects and develop a framework for community outreach. Finally, she helped develop a Needs and Strengths Assessment report for the Greater Los Angeles County region, as part of California's IRWM Disadvantaged Community Involvement Program. The project used a geographic information system (GIS) to visualize community-gathered input from over 104 communities within LA to identify opportunities for water-related investments.

The Findings.

The Greater LA County Needs and Strengths Assessment highlighted community-forward recommendations that align with many of CWH's water initiatives, including:

- A regional drinking water education program would help address multiple challenges at once, including building trust around tap water and paving the way for future engagement around recycled water.
- There is a demand for a drinking water grading system that will help reduce confusion around annual water quality reports, provide consistent "apples-to-apples" water quality standards across communities in the region, and will ultimately build trust and accountability between the community and their service provider(s). Funding should also be directed to help agencies offer at-home water testing and at-home filtration systems.
- There is a need to consider more opportunities to work with schools on sharing green space with the general public, supporting community gardens at schools, centralizing educational resources at schools, and increasing stormwater capture projects at schools.
- Nonprofits and grassroots organizations are vital liaisons between larger resources (e.g. food banks, social services, health care) and the people who really need them. IRWM and Safe Clean Water capacity building dollars should help local organizations develop more programs around water education and leadership.

The Impact.

This work highlighted the significant water needs across LA communities, as well as many opportunities to amplify community-forward approaches to IRWM. There are currently large spending commitments for water improvements in Southern California; the efforts at CWH will help ensure that funds are being directed in ways that align with community priorities and offer multiple benefits like open space creation, water quality and quantity improvements, good jobs, and education. CWH can build-off this work to accelerate the pace of green infrastructure and water resiliency projects in the Greater LA region, and provide a community engagement model for other water-stressed areas in the West.

The Student.



Ryanna Fossum is a Master of Environmental Management candidate at the Yale School of the Environment. She is interested in exploring integrated regional watershed management in the urbanized West. Prior to Yale, Ryanna researched California water policy to better engage local elected officials with community-led water resilience efforts. More recently, she worked on a range of urban design projects to confront public space challenges in New York City. She holds a BA from Oberlin College and majored in Geology and Environmental Studies.