

The year 2019 was marked by warmer temperatures around the world and extreme climate events like drought, floods, and wildfire. Meanwhile, billions of people remain without access to adequate water and sanitation. The year was also marked by great courage and collective action to protect the planet, advancing aggressive strategies and solutions. The Pacific Institute also rose to the challenge by announcing a new strategic direction and goal to *catalyze the transformation to water resilience in the face of climate change by 2030*. We have always focused on water and below we provide a few examples of our work to advance water resilience in 2019.



Supporting Vulnerable Communities

The failure to meet basic needs for safe water and sanitation worldwide is one of the great tragedies of our age, with billions of people paying the price in illness and poverty. In 2019, we partnered with Water.org to assess the connections between climate change and access to clean water and sanitation. We co-authored <u>Climate-Equitable</u> <u>Water</u>, calling for the use of smart investments to meet water and sanitation needs.

Credit: Water.org

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Water has become a flashpoint for conflict as population growth and climate change increase water scarcity. In 2019, over 400 new entries were added to our *Water Conflict Chronology*, bringing attention to the acceleration of water-related conflicts around the world, as well as actionable solutions. As one example, these data were integrated into the *WPS Global Early Learning Tool* to predict areas at risk of violent conflicts. Our Chronology—the most comprehensive database on water-related violence—is helping global development, diplomacy, disaster response, and defense experts work with country governments and local stakeholders to intervene and defuse conflicts before violence occurs.

We are also working to improve access to water and sanitation closer to home. We published <u>Plumbing</u> <u>the Depths: Californians Without Toilets and Running Water</u>, a report measuring the number of Californians without toilets and hot and cold running water because of incomplete household plumbing and homelessness. Our findings, presented to the California Water Resources Control Board, are informing policies on water and sanitation access in the state.

Protecting Natural Systems

To transition to a climate-resilient future, we need water management strategies that provide multiple benefits. We developed a framework for incorporating co-benefits and potential tradeoffs into water investment decisions. The framework is described in *Moving Toward a Multi-Benefit Approach for Water Management*. We are now applying the framework in Austin, Texas to evaluate rainwater harvesting opportunities, and in Southern California to inform stormwater capture project planning and prioritization.





Advancing Water Efficiency

The risk of water scarcity is growing, and communities around the world are looking for ways to make wiser use of the water they have. This year we published <u>The</u> <u>Cost of Alternative Urban Water Supply and</u> <u>Efficiency Options in California</u> in the journal <u>Environmental Research Communications</u>. Our research found that water conservation and efficiency are the least expensive ways to meet water needs, followed by stormwater capture and reuse.



Also in 2019, we examined the potential for sustainable landscapes on business

properties in Southern California. Our analysis, described in *Sustainable Landscapes on Commercial and Industrial Properties in the Santa Ana River Watershed*, found that transforming landscapes on business properties can save water while also improving water quality and reducing flood risk, among other benefits. We are now working with businesses in the region to adopt sustainable landscaping practices and are evaluating the benefits of those investments for businesses and communities.



CEO Water Mandate



Mobilizing the Business Community

The <u>CEO Water Mandate</u> is a special initiative of the UN Secretary-General and the <u>UN Global Compact</u>, implemented in partnership with the Pacific Institute. These key partners work together as the CEO Water Mandate Secretariat to mobilizes a critical mass of business leaders to address global water challenges. The Mandate is now endorsed by over 170 companies from a range of industry sectors and regions around the world. In 2019, among other projects we collaborated with partners to create a guide that outlines how companies can set site water

targets that maximize impact and improve water security, <u>Setting Site Water Targets Informed by Catchment</u> <u>Context: A Guide for Companies</u>. We piloted this work in California's Santa Ana River watershed and are currently working on pilots in South Africa, India, and Brazil.

For additional information and to learn more about our initiatives visit <u>www.pacinst.org</u>. To stay up to date on our work, sign up for our monthly newsletter and follow us on social media.

Pacific Institute 654 13th St., Preservation Park, Oakland, CA 94612 | 510-251-1600 | pacinst.org