PATHS FOR EQUITABLY ADVANCING WATER CONSERVATION IN THE SAN FRANCISCO BAY AREA

January 2023

By Sasha Harris-Lovett, Bridget C. Gile, David L. Sedlak, and Richard G. Luthy





Water Supply in Crisis

The San Francisco Bay Area faces a growing water crisis. In 2022, Sierra snowpack measured just 37% of the historical average, resulting in 5% allocations by the State Water Project and an 11% cutback targeted by the Hetch Hetchy Regional Water System. Looking ahead, the outlook does not improve: climate scientists warn that Sierra snowpack at the end of the 21st century may average only 20% of what it averaged at the end of the 20th century.

Conservation as a Solution

New solutions are urgently needed to ensure a sustainable water supply future, and water conservation ranks among the most effective strategies. Through conservation, communities can reduce drought impacts and accommodate growth with lower cost, energy, and environmental impact than it would take to develop new supplies. Conservation must be implemented thoughtfully, however, to avoid unintended consequences to affordability, quality of life, wastewater operations, and recycled water supply.



In 2022, _

Sierra snowpack measured just 37%

of the historical average. Climate scientists project a further drop to

by the end of this century.

Implementing Conservation Thoughtfully

In a two-day workshop focused on equitably advancing water conservation in the Bay Area, participants discussed strategies, opportunities, and challenges building towards this goal. The following table summarizes water conservation challenges and solutions identified through the workshop and discussed in more detail in the full report. While these challenges and solutions are not intended to be a complete list, they provide key areas of focus for advancing water conservation.

CHALLENGE		SOLUTIONS
\$ 	Affordability	 Reach low-income households with water bill assistance programs Incentivize water-efficient upgrades without up-front cost burden Address differing levels of use through budget-based water rates
\$	Equitable Landscape Transformation	 Incentivize drought-tolerant landscaping without up-front cost burden Provide training for "green collar" jobs to transform landscapes Unlock co-benefits through integrated planning efforts Prioritize water use supporting public green space
M	Motivation	 Develop regional vision for how to use "saved" water Invest in behavioral change through education and outreach Celebrate successes achieved through conservation
(T)	Compatibility with Existing Water Infrastructure	 Plan to right-size infrastructure with conservation in mind Prioritize outdoor water conservation Monitor wastewater influent to support data-driven adaptations Reassess demand assumptions for drought planning Invest in supporting drought security measures like storage

Path Forward

Through water conservation, the Bay Area can continue working towards a future in which water supply enhances environmental and social goals, through responsible use and without sacrificing quality of life. Advancing conservation most equitably will require co-production of plans and goals, including resource managers, land use planners, and marginalized communities and Tribes. It will also require new research directions supporting these efforts. Effective partnerships can help ensure water conservation is integrated into broader regional planning efforts for climate resilience, social justice, water supply and wastewater treatment, and ecological sustainability.

