



A Survey of Efforts to Achieve Universal Access to Water and Sanitation in California

Kena Cador and Angélica Salceda

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Lead Authors

Kena Cador, *Equal Justice Works Fellow sponsored by Apple Inc. and O'Melveny & Myers, ACLU Foundation of Northern California*

Angélica Salceda, *Staff Attorney, ACLU Foundation of Northern California*

Project Advisor

Laura Feinstein, Ph.D., *Senior Research Associate, Pacific Institute*



ACLU Foundation of Northern California

39 Drumm Street

San Francisco, California 94111

Phone: 415.621.2493 | Facsimile: 415.255.1478

TTY: 415.863.7832

www.aclunc.org



Pacific Institute

654 13th Street, Preservation Park

Oakland, California 94612

Phone: 510.251.1600 | Facsimile: 510.251.2203

www.pacinst.org

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ABOUT THE AUTHORS

KENA CADOR, EQUAL JUSTICE WORKS FELLOW SPONSORED BY APPLE INC. AND O'MELVENY & MYERS

Kena Cador is an Equal Justice Works Fellow at the ACLU Foundation of Northern California, where she advances racial and economic justice. Her work involves improving access to basic municipal services, including water, for residents in disadvantaged unincorporated communities in California's Central Valley. Prior to joining the ACLU, Kena focused on labor law and employment discrimination as the Peggy Browning Fellow at Murphy Anderson, PLLC. Before that, Kena worked on access to municipal services at the U.S. Department of Justice, Civil Rights Division. Kena has also worked on housing and employment discrimination issues in Washington, D.C., at the U.S. Office of Special Counsel, Lawyers' Committee for Civil Rights Under Law, and Washington Legal Clinic for the Homeless. Kena received her B.A., with distinction, in Sociology and Black Studies from the University of California, Santa Barbara and her M.A. in Africana Studies with special research interests in Critical Race Theory from New York University. Kena is a graduate of Georgetown University Law Center where she was Editor-in-Chief of the Georgetown Journal on Poverty Law and Policy.

ANGÉLICA SALCEDA, STAFF ATTORNEY

Angélica Salceda is a staff attorney at the ACLU Foundation of Northern California, where she focuses on civil rights and civil liberties enforcement, including economic justice and immigrants' rights. Prior to joining the ACLU as a staff attorney, Angélica was an Equal Justice Works Fellow sponsored by Fenwick

& West. Angélica received her undergraduate degree in Political Science and History with a minor in Anthropology from University of California, Los Angeles. She was a 2007-2008 Jesse M. Unruh Assembly Fellow and was subsequently hired as a legislative aide in the California Assembly. There, she worked on a number of policy issues, including environmental justice and immigrants' rights. Angélica is a graduate of UC Berkeley School of Law.

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INTRODUCTION

IN 2010, the United Nations General Assembly adopted Resolution 64/292, which declared that “the right to safe and clean drinking water and sanitation [is] a human right that is essential for the full enjoyment of life and all human rights.” Two years later, the California Legislature added section 106.3 to the California Water Code (Section 106.3), which declared that “every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.”¹ Although the formulation of the human right to water (HRTW) for sanitary purposes in Section 106.3 is not as explicit as the UN resolution, it is also true that the availability of safe and clean drinking water presupposes the sanitary disposal of human waste. Accordingly, the statute has served as the touchstone for California drinking water and sanitation efforts.

Since 2012, California government agencies and non-governmental stakeholders have focused most of their efforts on drinking water. These efforts, while commendable, have been incomplete. First, the need for drinking water access and quality continues to outstrip capacity and resources. Second, while sanitation requires an adequate supply of water, it also requires an array of public and private infrastructure and services for the hygienic disposal of human waste, including household-level infrastructure like a toilet or septic tank.

This paper will focus on needs, efforts, and recommendations to advance the right to water for drinking and sanitary purposes. First, we summarize the legislative efforts that set the foundation for the adoption of HRTW in California. Second, we discuss the challenges facing residents of disadvantaged unincorporated communities, particularly in light of California’s recent drought, to illustrate the drinking water and sanitation needs of these communities. Third, we review the state’s implementation of Section 106.3 and efforts by non-governmental stakeholders to advance

1 Cal. Wat. Code, § 106.3(a). Many key terms employed in the statute (such as “safe and clean,” “affordable,” “accessible,” “consumption,” “cooking,” and “sanitary purposes”) are not defined in the statute and leave room for interpretation. We propose definitions for these terms in the companion report, *Measuring Progress Toward Universal Access to Water and Sanitation in California: Defining Goals, Indicators, and Performance Measures*.

HRTW, focusing on the need to invest in programs and funds to address the right to water for sanitary purposes. Last, we provide recommendations to tackle the existing and ongoing needs related to sanitation, with a focus on household-level infrastructure.

I. CALIFORNIA LEGISLATION ADVANCING THE HUMAN RIGHT TO WATER

California has a long legacy of adopting innovative policies to prioritize access to water for its residents. The earliest policies focused on drinking water but not sanitation. In 1928, voters amended California’s Constitution to include a “reasonable use” doctrine, recognizing that all uses of water, and water rights, must be reasonable and not wasteful.² The constitutional amendment was in response to a 1926 California Supreme Court ruling that a riparian water right holder was not required to use water in a reasonable manner.³

In 1943, the legislature prioritized the use of water for domestic purposes by declaring that it is the “established policy of this State that the use of water for domestic purposes is the highest use of water.”⁴ In 1989, the legislature further declared that “every citizen of California has a right to pure

and safe drinking water.”⁵ The purpose of the policy was to “reduce to the lowest level feasible all concentrations of toxic chemicals that, when present in drinking water, may cause cancer, birth defects, and other chronic diseases.”⁶

California has also prioritized the water needs of historically underserved communities. For example, small community water systems serving severely disadvantaged communities—defined as communities with a median household income of less than 60 percent of the statewide average—can now seek reimbursement from a state fund for 100 percent of the construction costs of water infrastructure projects, an increase from the previous ceiling of 80 percent.⁷ Cities and counties are now required to consider the existence and needs of unincorporated communities—areas outside city limits—when updating general land use plans.⁸ Local agency formation commissions must consider the needs of nearby disadvantaged unincorporated communities when reviewing and updating city and special district spheres of influence—areas where the city has the power to affect development.⁹ Public water systems are now

2 Cal. Const. art. XIV, § 3 (1928) (superseded by Cal. Const. art. X, § 2 (1976)).

3 A riparian right is the right to use water from a source that one’s land physically touches, if that water is not already appropriated ([California Water Boards 2017](#)). Riparian rights in California were upheld by the California Supreme Court in *Lux v. Haggin*, 69 Cal. 255 (1886). *See also Herminghaus v. Southern California Edison Co.*, 200 Cal. 81 (1926).

4 *See* Cal. Leg. Sess. 1943, ch. 368, (Cal. 1943) *codified as* Cal. Wat. Code, § 106; also Cal. Code Regs., tit. 23, § 660 (2017); Cal. Wat. Code, § 1254 (“the [water] board shall be guided by the policy that domestic use is the highest use and irrigation is the next highest use of water”).

5 Cal. Assemb. Bill 21, 1989-1990 Reg. Sess., ch 823, (Cal. 1989) *creating* Cal. Health & Saf. Code, § 4010 *repealed and superseded by* Cal. S. Bill 1360, 1995-1996 Reg. Sess., ch. 415, (Cal. 1995) *codified as* Cal. Health & Saf. Code, § 116270(a).

6 Cal. Health & Saf. Code, § 116270(d).

7 Cal. Wat. Code, § 13476(j)(defining statewide average); Cal. Assemb. Bill 983, 2011-2012 Reg Sess., ch 515, (Cal. 2011) *creating* Cal. Health & Saf. Code, § 116761.23(d) (superseded by California State Water Resources Control Board, *Policy for Implementing the Drinking Water State Revolving Fund (effective January 1, 2015)* at 12, Section VII. Assistance for Severely Disadvantaged Communities).

8 Cal. Gov’t Code, § 65302.10; Cal. S. Bill 244, 2011-2012 Reg. Sess., ch. 513, (Cal. 2011).

9 *See* Cal. Gov’t Code, § 56430; Cal. S. Bill 244, 2011-2012 Reg. Sess., ch. 513, (Cal. 2011). A disadvantaged unincorporated community refers to an area of inhabited land that is located in an unincorporated area of a county, and which has a median household income less than 80 percent of the statewide median household income. *See* Cal. Gov’t Code, §§ 56033.5 and 56046; Cal. Wat. Code, § 79505.5(a).

required to translate their Consumer Confidence Reports—annual reports sent to consumers that notify them of water quality issues—when at least 10 percent of water district customers speak a second language.¹⁰ Once again, these policies focus mainly on the availability and delivery of clean drinking water, and not on sanitation.

THE ADOPTION OF CALIFORNIA'S HUMAN RIGHT TO WATER

With the enactment of Section 106.3 in 2012, California became the first state in the country to enact legislation recognizing HRTW. The statute directs all relevant state agencies to consider the human right to water when “revising, adopting, or establishing policies, regulations, and grant criteria” related to domestic water use.¹¹ Section 106.3 does not expand state obligations to provide water, nor does it apply to water supplies for new development, but it does provide a critical first step in ensuring all communities enjoy the fundamental right to water for drinking and sanitation: recognizing such a right exists, and affirming the state’s commitment to upholding that right.¹²

Section 106.3 also expanded the possibilities for advocates to continue to hold state and local governments and decision makers accountable to the communities they serve. As a result, agencies now have a duty to consider Section 106.3 in their decision making, although public water systems are explicitly excluded from that responsibility. HRTW is not self-executing, however, and its realization requires additional advocacy, funding, and implementation.



Source: PeopleImages

In 2012, the California Legislature added section 106.3 to the California Water Code (Section 106.3), which declared that “every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.”

II. CHALLENGES FACED BY RESIDENTS OF DISADVANTAGED UNINCORPORATED COMMUNITIES

Despite Section 106.3, the human right to water for sanitary purposes has gone unrealized in too many communities. There is no statewide estimate for the number of residents lacking adequate sanitation. An estimated 220,000 people lack access to an indoor flush toilet, or hot- and cold-piped water, but this number does not include people without access to adequate treatment and disposal systems ([Feinstein et al. 2018](#)). All 58 counties need improved access to water for drinking and sanitary purposes. Urban areas located in some of the state’s wealthiest counties face shortcomings,

10 Cal. Assemb. Bill 938, 2011-2012 Reg. Sess., ch. 514, (Cal. 2011), *codified as* Cal. Health & Saf. Code, § 116450 (h)(1) (B).

11 See Cal. Wat. Code, § 106.3(b).

12 See Cal. Wat. Code, §§ 106.3(c)-(d).

but low-income and farm-working communities bear the most significant burden.¹³

Close to three million Californians live in unincorporated communities that frequently “lack the most basic features of a safe, healthy, sustainable neighborhood” such as “potable drinking water [and] sewer systems” (Flegal et al. 2013, 7-9). Among the poorest and most isolated of these underserved areas, disadvantaged unincorporated communities are densely settled, low income, and largely home to people of color. These communities are governed by their county, but are frequently left out of local decision-making processes (Flegal et al. 2013, 7).

When natural disaster hits, these communities are disproportionately affected. The following section provides examples of how residents in three specific communities—Monson, East Porterville, and Shady Lane—had to adjust during the recent California drought that lasted from 2012 to 2017. The stories, derived from interviews and public sources, reveal the significant challenges communities faced every day due to lack of access to water for drinking and sanitation.

MONSON

Monson is a small, unincorporated community in Tulare County surrounded by agricultural fields and dairies. The population is primarily Latino, and of the approximately 200 residents, 41.2% live in poverty (United States Census Bureau- Monson. 2016).

Lala Luengas and her husband, Benjamin, have lived in Monson for 35 years (Lala Luengas, pers. comm., October 2017). As young parents, they

dreamed of having a place of their own, where their young children would have room to run and play. Monson was exactly what they were hoping for. They bought a home they could afford—which was in serious need of repair—and for over a year, spent their evenings and weekends fixing it up. Like other residents, they depended on a well for their water supply.

The Luengases first learned of problems with their water in the 1980s, when the state first tested their well. When the tests showed that their water had high levels of nitrates, the Luengases installed filters. Decades later, additional water tests confirmed continued nitrate contamination and convinced residents that a community-wide solution was necessary.

Then one hot morning in June 2014, Benjamin turned on the faucet and no water came out. Like everyone else in Monson, the Luengases bought countless cases of bottled water for drinking and cooking. For almost six months, Lala also obtained water through the kindness of her neighbor—whose well was much deeper—running a long hose from his well to their home. Conservation was still critical. “Not having water impacts the smallest details of your life,” Lala explained. The couple, like most people in the community, collected shower water in buckets to flush their toilet. With so many buckets of standing water, mosquito infestations multiplied in the spring and summer months, leaving everyone covered in bites.

Lala’s once-verdant garden, like others in the neighborhood, turned to dust, exacerbating her asthma. One by one, Lala’s beautiful rose bushes withered and died. The pine tree her daughter had brought home when she was a little girl, which shaded the property, dried up too. Lala has only been able to preserve one lonely rose bush, a gift given to her by a dear friend who had passed away.

13 The counties of San Francisco, Alameda, Santa Clara, and Los Angeles had the highest rates of individuals lacking indoor toilets and hot and cold water (Feinstein et al. 2018).

In November 2017, through the collaborative efforts of a number of organizations, a new community well was established, and Monson residents are now able to enjoy a reliable source of running water ([Magallon 2017](#)).

EAST PORTERVILLE

East Porterville, with a population that is 72.9% Latino and a median household income approximately half that of the state, is an unincorporated community in Tulare County ([United States Census Bureau- California 2016](#); [United States Census Bureau- East Porterville 2016](#)). Lacking a public water system, its residents relied on private wells ([Lurie 2015](#)). During the recent drought, residents often turned on their taps to find a trickle of water, or nothing at all. The lack of household-level running water vastly complicated simple daily tasks.

In 2014, Angelica Gallegos, her husband and two daughters lost running water to their home. After that, their only source of water was a tank that they had to refill every few days at the local fire station. They filled buckets from the tank to bathe, wash dishes, and flush toilets. They spent hundreds of dollars to wash clothes at a local laundromat and buy paper goods so they would not have to wash dishes. The extra expenses meant there was no money to pay for their daughter's after-school cheerleading club ([Medina 2014](#)).

Juana Garcia, a mother of five with Lupus and arthritis, found it physically challenging to haul water to her home. The family washed dishes in two buckets, and reserved the waste water for toilet flushing. They took showers at portable showers set up at a local church when possible. Bottled water was reserved for essentials like brushing teeth. Even meal choices were affected; Juana and other families relied on sandwiches, fast food, or canned food, rather than fresh vegetables, which

require too much water for washing ([Lurie 2015](#); [Medina 2014](#)). Some parents kept their children home from school if they had been unable to shower, out of fear that the authorities would take them away if they were too dirty ([Medina 2014](#)).

Residents asked government officials for help for months, to no avail. Eventually, the county stepped in to install large plastic tanks of water for approximately three hundred homes whose wells had gone dry, but over 1,300 homes remained without water ([Lurie 2015](#)).

Finally, in April 2017 the State Water Resources Control Board approved a total of up to \$35 million in grants and loan forgiveness to connect East Porterville residents to the City of Porterville's municipal water system ([DiLuccia 2017b](#)).

SHADY LANE MOBILE HOME PARK

Shady Lane Mobile Home Park is on the outskirts of the unincorporated community of Thermal in Riverside County and near the City of Coachella, where the population in the unincorporated community is 99.9% Latino, many of whom are migrant farmworkers, and the median household income is only \$28,443 ([United States Census Bureau-Thermal 2016](#); [UC Irvine School of Law 2016](#)). The trailer park, home to 56 families, has for many years relied on a septic system. When septic systems fail—usually due to age, misuse or improper design—the failure results in wastewater being discharged to the surface or backing up into plumbing fixtures, posing public health risks and environmental contamination ([County of Riverside Department of Environmental Health 2016, 44](#)). People like Joel Beltran, who lives in the park with his wife and four children, pay the price. When his septic tank overflows, it fills his bathroom with “pure poop,” making it impossible to give his family the “proper house” he envisioned for them ([Palta 2015](#)).

In 2016, with the help of outside advocates, Shady Lane received \$250,000 in grant funding to enable residents to connect to the City of Coachella's drinking water and sewer systems ([UC Irvine School of Law 2016](#)).

As these stories illustrate, home sanitation requires adequate water, but it also requires household-level infrastructure like functioning toilets and septic systems for residents who are not served by a public sewer service. The residents of Monson, East Porterville, and Shady Lane have faced daily challenges due to lack of adequate drinking water and sanitation. Persistent efforts by community members and advocates drew public and government attention to their plight. Although conditions in these communities have improved, there are undoubtedly many residents across the state whose stories remain untold.

III. IMPLEMENTING AND ADVANCING CALIFORNIA'S HUMAN RIGHT TO WATER

A diverse array of programs administered by state and local government and nonprofit organizations seeks to address sanitation needs and the lack of safe, clean, affordable, and accessible water in disadvantaged communities. In many of these communities, nonprofit organizations operate in a quasi-governmental role, assisting in the development of local solutions, or supporting communities in accessing outside services. These organizations' programs operate on a range of scales, including temporary, local solutions; long-term, large-scale solutions; and solutions to underlying structural challenges.

Our analysis revealed a number of gaps in HRTW implementation. First, more resources are focused on addressing inadequate drinking water than on addressing inadequate sanitation. Second,

there is a lack of state services for households not served by public water systems, and a lack of statewide, comprehensive programs to address household-level problems. Finally, there is a lack of comprehensive data necessary to understand the scope of the problem statewide.

As a result, efforts to address sanitation issues remain incomplete. Programs and funding opportunities created by the state touch on aspects of sanitation, principally the functioning of centralized wastewater systems. But state investment should also address people's everyday household-level sanitation needs, including failing septic systems. As the stories about drought-stricken communities illustrate, even families able to pipe water into their homes may not be able to realize their right to water for sanitary purposes.

Section 106.3 does not define "sanitation," and there are no existing regulations that provide guidance on the issue. Notwithstanding, it seems clear that realizing the right to water for sanitary purposes would require that all Californians have functioning sanitation systems outside and inside their homes. Freedom from exposure to waterborne contaminants requires systems that safely process wastewater, and working pipes and fixtures that enable residents to wash their hands, bathe, and flush their toilets. Where necessary, residents also require resources to fix or replace failing septic systems. Many Californians, however, lack household-level infrastructure to meet daily sanitation needs ([Feinstein et al. 2018](#)).

A major barrier to resolving problems related to sanitation is a lack of reliable data, which makes an accurate needs assessment extremely difficult. To begin with, there is no comprehensive quantification of California's sanitation infrastructure needs, as there is for drinking water infrastructure.

For example, in 2013 the US Environmental Protection Agency (EPA) estimated it would cost \$44.5 billion to meet California's drinking water infrastructure needs ([US EPA 2013, 18](#)). However, neither the EPA nor any other government entity has successfully quantified California's sanitation infrastructure needs. The closest estimate that the EPA provides is that California will need \$26.2 billion over the next 20 years to meet the capital costs of publicly owned treatment works for wastewater treatment, sewer collection and overflow, stormwater management, and recycled water distribution needs ([US EPA 2016, A-1](#)). This estimate, however, does not account for any costs related to the repair and maintenance of septic tanks or other household-level sanitation infrastructure ([US EPA 2016, Appendix D](#)). In the same report, the EPA estimates that 20-year capital costs for septic systems nationwide would amount to \$22.1 billion. But the report provides no state-by-state breakdown, and the nationwide figure is based on information from only 27 states.

In addition, California has never had a centralized program for inventorying the number of homes relying on septic systems. In 2000, the California State Water Resources Control Board (Board) *estimated* that 1.2 million single-family households relied on septic tanks, with an *estimated* 14,000 new tanks installed every year.¹⁴ Although these estimates are now eighteen years old, they have yet to be revised or updated ([Alarcon et al. 2015, 11](#); [California Water Boards 2012, 1](#)). Relatedly, the California Department of Water Resources (Department) recognizes that there is currently no

statewide estimate for the number of homeowners with inadequate or improperly functioning septic systems ([Alarcon et al. 2015, 11](#)). Although additional information may become available as early as this year, as local agencies regulating septic tanks begin their required annual reporting, under the Board's Onsite Wastewater Treatment System Policy, information gaps will remain ([California Water Boards 2012, 14](#)).

In light of this lack of comprehensive information, it is perhaps not surprising that there are currently no government programs or funding to directly address the issue of household-level sanitation. The few programs that do address sanitation needs focus on providing community-wide technical and financial assistance. While such assistance continues to be needed, these programs are not designed to ensure that individual families have the necessary household-level infrastructure to meet sanitation needs.

Because the right to water adequate for sanitary purposes is a critical component of Section 106.3, the state should focus on sanitation as well as drinking water needs in order to fully advance HRTW.

A. GOVERNMENT ENTITIES IMPLEMENTING CALIFORNIA'S HUMAN RIGHT TO WATER

Under Section 106.3, "[a]ll relevant state agencies, including the [Board and Department]... shall consider [HRTW] when revising, adopting, or establishing policies, regulations, and grant criteria."¹⁵ Although there are other state agencies that currently implement (or that should be implementing) HRTW, the following section focuses on the Board and Department as the two

14 California State Senate Appropriations Committee. Fiscal Summary: AB 885 (Jackson) August 28, 2000 ("As of April 2000 the [State Water Resources Control Board] indicates that at least 1.2 million... septic systems exist on single-family sites statewide... not including commercial or multiple-family sites"), https://leginfo.ca.gov/faces/billAnalysisClient.xhtml?bill_id=199920000AB885.

15 Cal. Wat. Code, § 106.3(b). This section also includes the Department of Public Health, but as of 2014 it is no longer a relevant state agency for the purposes of implementing HRTW in California.



Source: Chieko Hara, The Porterville Recorder

Residents attend the final East Porterville Water Supply Project meeting. At the meeting, city, county, and state representatives updated residents on the status of the East Porterville Supply Project, which focused on connecting about 1,100 properties in East Porterville to the City of Porterville's water system.

state agencies specifically identified in Section 106.3. While the Board and Department have engaged in laudable efforts to further the human right to drinking water, the programs and funding administered by these entities do not place the same focus on addressing sanitation needs.

California State Water Resources Control Board¹⁶

IN BRIEF:

- **Scope:** The Board is the primary state agency responsible for water quality in California. It coordinates and supports nine regional water quality control boards, oversees wastewater discharge and public drinking water systems, and allocates surface water rights. The Board regulates public water systems: systems

that serve at least fifteen service connections or regularly serves at least twenty-five individuals.

- **Primary Programs Addressing the Human Right to Water:** The Board currently administers a variety of funds that provide financial assistance loans and grant funds to meet California's water needs through the Division of Drinking Water and Office of Financial Assistance.
- **Gaps:** However, the Board's active funding and programmatic opportunities are not currently available to individual households; the agency's focus on public water systems currently leaves out private wells and water systems serving fewer than fifteen connections, which are regulated at the local level, rather than by the state; none of its programs or the funds it administers address the in-home infrastructure needed for sanitation.

¹⁶ Unless otherwise noted, the information in this section was obtained from the State Water Resources Control Board website.

OVERVIEW

The Board is the agency responsible for protecting water quality and allocating surface water rights throughout all of California. The agency has made meaningful program and funding investments in drinking water. Yet household-level sanitation needs remain unmet because the Board's funding and programmatic opportunities are not available to individual households.

Created by the California Legislature in 1967, the Board develops statewide water protection plans, establishes water quality standards, guides the state's nine Regional Water Quality Control Boards, and administers several programs and funds.

In July 2014, the Board assumed responsibility for the state's Drinking Water Program from the California Department of Public Health.¹⁷ To reflect its expanded scope, the Board adopted a resolution revising its mission statement: "To preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper resource allocation and efficient use, for the benefit of present and future generations" ([State Water Resources Control Board 2015](#)). In February 2016, the Board adopted a resolution identifying HRTW as a top priority and directed implementation of Section 106.3. The resolution also refined the Board's definition of "affordability" and the "amount of water necessary" for drinking and sanitation. Specifically, the Board recognized that considerations relevant to "affordability of water" include "economic and cost factors, water supply operation and maintenance expenses, and household incomes" ([State Water Resources Control Board 2016, 3](#)). The Board also estimated

that the average Californian requires 50 to 55 gallons of water per day.¹⁸

EXISTING FUNDS

The Board currently administers a variety of funds that provide financial assistance loans and grant funds. During the 2015-2016 fiscal year, there was a total of \$13.1 billion available through 11 funds. Some of those funds came from the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1), which authorized \$7.545 billion in general obligation bond funds for a wide array of California's water needs ([Legislative Analyst's Office 2014](#)).

The two largest funds administered by the Board are the Drinking Water State Revolving Fund (DWSRF) and Clean Water State Revolving Fund (CWSRF). The DWSRF and CWSRF were established by the Clean Water and Safe Drinking Water Acts, respectively, and are designed to provide funds to help meet the standards set forth in those acts. The DWSRF provides financial assistance to public water systems for drinking water infrastructure improvements, while the CWSRF provides financial assistance to public agencies, nonprofits, tribes, and private entities for projects that protect California's waters from pollution.

The CWSRF is the most robust fund administered by the Board, with over \$1.9 billion in committed funding. The CWSRF supports the three broad objectives of the California Water Action Plan: more reliable water supplies; restoration of important species and habitat; and a more

17 Cal. Health & Safety Code § 116271.

18 In the companion report to this document, *Measuring Progress Toward Universal Access to Water and Sanitation in California: Defining Goals, Indicators, and Performance Measures*, we estimate the true value to be 47 gallons per person per day, for a person with efficient water use behaviors and typical household devices and leaks. Eliminating leaks reduces the value to 41 gallons per day.

resilient, sustainably managed water resources system ([Division of Financial Assistance 2017, 5](#)). The CWSRF offers low-cost financing for a wide variety of water quality projects and is capable of financing \$1 million to \$100 million projects.

While CWSRF funds are theoretically available to provide loans to homeowners to address septic tank problems, no such loans have yet been made. Consistent with legislative intent, the Board in 2010 authorized the use of CWSRF funds for local agencies to establish and administer mini-loan programs ([California Water Boards 2012, 44](#)).¹⁹ These programs would make low-interest loans available to households to repair or replace septic systems that are not in compliance with local ordinances ([California Water Boards 2012, 44](#)). While this is a pioneering approach by the Board, households cannot yet take advantage of this funding because no local agency in California has yet established an administrative program to administer these mini-loans.²⁰

The DWSRF provides financial assistance to public water systems to improve drinking water infrastructure ([Division of Financial Assistance 2016b](#)). However, this funding does not provide assistance with household-level sanitation needs (Board Personnel, pers. comm. December 2017).

The Board also administers funds for five Proposition 1 programs: Small Community Wastewater, Water Recycling, Drinking Water, Stormwater, and Groundwater Sustainability. Some of these funds explicitly address drinking water needs. To the extent that the funds address aspects of sanitation, they focus exclusively on

wastewater infrastructure and/or recycling. None of these funds addresses household-level sanitation needs.²¹

EXISTING PROGRAMS AND EFFORTS

The Board's programs and efforts address both the right to drinking water and water for sanitary purposes. For example, its efforts to ensure water safety focus on public water systems, as defined by the California Safe Drinking Water Act.²² Under the act, a public water system is defined as a system that serves at least fifteen service connections or regularly serves at least twenty-five individuals. By focusing on public water systems, however, this work leaves out private wells, and water systems serving fewer than fifteen connections, which are regulated at the local level, rather than by the state.

In February 2017, the Board launched the Human Right to Water Web Portal (Portal) to improve transparency, accountability, and access to information about drinking water systems in California ([DiLuccia 2017a](#); [California Water Boards 2010](#)). The Portal provides success stories about drinking water systems, and detailed information identifying past and present water system compliance throughout the state. The Portal relies on information available on community and non-transient, non-community public drinking water systems that are regulated by the Board or the Local Primacy Agency, a local agency with regulatory oversight of certain water systems. Through use of the Portal, the Board provides information to the public concerning drinking water issues, and alerts the public to gaps in that information ([State Water Resources Control Board 2017](#)).²³

19 Cal. Wat. Code, § 13291.5; Cal. Code Regs., tit. 23 § 2924 (2017).

20 According to Board personnel, the High Desert Water System in Yucca Valley is working on establishing such a program, but it is not in place yet and not expected until June 2018 at the earliest.

21 For more information regarding Proposition 1 funding visit https://www.waterboards.ca.gov/water_issues/programs/grants_loans/.

22 Cal. Health & Safety Code § 116275(h).

23 These information gaps include water systems that (1) the

By contrast, the Board's programs addressing the right to water for sanitary purposes are fewer and smaller; under at least one program, monitoring and regulatory authority lies with local agencies. For example, in 2000, the California Legislature adopted Assembly Bill 885, which required the Board to adopt regulations or standards for permitting and operating onsite wastewater treatment systems (OWTS), or septic tanks.²⁴ While this was a promising step, the Board did not adopt a policy in response to this legislation until 2012 ([California Water Boards 2012](#)).²⁵ This policy keeps OWTS permitting at the local level, giving local agencies discretion about how to regulate septic tanks.

The Board's Small Community Wastewater Strategy promotes strategies to assist small and/or disadvantaged communities with wastewater needs. The strategy provides technical and financial assistance, including preparation of grant applications, compliance with audits, and assistance with planning and budgets, among other activities. The Board also operates the Sanitary Sewer Overflow Reduction Program. Under that program, public agencies that own or operate sanitary sewer systems have to develop and implement sewer system management plans and report all overflow issues to the Board's online database. The Board provides the public with a map of overflow incidents in the state. While these two programs are critical and necessary, they do not address other sanitation needs such as tracking individual home overflow issues,

providing technical assistance to families relying on septic tanks, or providing grants and loans for household level infrastructure.

In sum, the Board has taken critical first steps toward addressing California's estimated \$44.5 billion in drinking water needs. But none of its programs or the funds it administers address the in-home infrastructure needed for sanitation. With respect to septic tanks, the Board has taken the important step of authorizing local agencies to apply to use CWSRF funds for loans to individual homeowners to bring septic tanks into compliance with the OWTS policy, but no local agency has done so ([California Water Boards 2012](#)).²⁶ Thus, homeowners do not currently have access to funds for this purpose. In addition, under the current regulatory regime, regulation of septic tanks lies with local agencies. While this may have the advantage of allowing regulation to be tailored to local conditions, it places the burden of regulation on small agencies that may not have the resources to devote to the issue. This localized approach also creates potential inconsistencies and erects further barriers to centralizing data.

California Department of Water Resources²⁷

IN BRIEF:

- **Scope:** The Department of Water Resources (Department) is responsible for managing and protecting all of California's water resources, including the State Water Project, which provides water to over 25 million Californians.
- **Primary Programs Addressing the Human Right to Water:** The Department currently administers over 20 separate funds that address a number of water issues and provide financial

Board does not have regulatory authority over, (2) exceed a state standard for a contaminant that has no federal standard, (3) are without current, reported monitoring data, (4) are in violation of a federal standard but have not received an enforcement action, and (5) are in violation for total coliform.

24 Cal. Assemb. Bill 885, 1999-2000 Reg. Sess., ch. 781, (Cal. 2000) *codified as* Cal. Wat. Code, § 13291.

25 See Cal. Code Regs., tit. 23 § 2924 (2017).

26 Cal. Code Regs., tit. 23 § 2924 (2017).

27 Unless otherwise noted, the information in this section was obtained from the Department of Water Resources website.

assistance to local agencies and projects.

- **Gaps:** However, funds are not available for individual households and the agency recognizes there is no statewide estimate of Californians without adequate sanitation whose homes are connected to a sewer system and centralized wastewater treatment plant.

OVERVIEW

Created by the Legislature in 1956, the Department's mission is to manage California's water resources, in cooperation with other agencies, to benefit Californians and to protect, restore, and enhance the natural and human environments. The Department manages all of California's water resources, including the State Water Project—a massive system of reservoirs, aqueducts, power plants, and pumping plants that provides water for 25 million Californians. To achieve its mission, the Department develops strategic goals and plans related to water resources, and works to prevent and respond to environmental events that can threaten public health and water resources. The Department also operates a number of programs and funds that address water supply, water safety, and environmental needs.

Under Section 106.3, the Department is a state agency that must consider HRTW when adopting, revising or establishing policies, regulations, and grant criteria.²⁸ The Department's strategic plan does not list HRTW among principles that guide and focus its implementation of programs and activities, but it has considered HRTW when adopting certain guidelines. For example, the Department considered HRTW when adopting the 2016 Integrated Regional Water Management Guidelines—a program that provides funding for planning, disadvantaged community involvement, implementation, and grants to support sustainable

groundwater planning and water-energy programs ([Department of Water Resources 2016, 6](#)). The Department also supported the California Tribal Water Summit's Guiding Principles and Statement of Goals, which included recognition of HRTW, and guidelines for advancing the tribes' objectives in the California Water Plan ([Rodriguez 2013, 13-15](#)).²⁹ Finally, the Department incorporated HRTW into the 2013 California Water Plan update. Now that right is part of the planning process (David Sandino (Attorney, Office of the Chief Counsel), e-mail to authors, December 21, 2017).

EXISTING FUNDING

The Department currently administers over 20 separate funds that address a number of water issues and provide financial assistance to local agencies and projects. Two of these funds address drinking water, but none of them addresses wastewater or sanitation issues. The California Safe Drinking Water Bond Law of 1988 is a program that provides loans and grants to water systems to meet drinking water standards. The program makes the funds available to local jurisdictions, private partnerships, tribes, and associations, but not to individuals. Currently, there is approximately \$3 million remaining for current or new projects under this fund, with enough applications received to close out the program in 2018 (Jeremy Callihan (Associate Governmental Program Analyst), e-mail to authors, December 21, 2017). The Safe Drinking Water Program provides funding to test new water treatment technologies that remove contaminants from California's drinking water supply. Funding is also available to communities that want to disinfect drinking water with certain

28 Cal Wat. Code 106.3(b).

29 The document was created by the Tribal Advisory Committee, responsible for creating a forum where California Native American tribes and organizations can help develop material for the California Water Plan and ensure tribal perspectives on land, water, and culture are included.

technologies, like ultraviolet. Only public water systems regulated by the Board and other public entities can apply for this funding; systems serving fewer than fifteen connections and systems that do not serve disadvantaged communities may be required to match the grant amount. During the 2015-2016 fiscal year, the Department made \$5 million available from this fund. All other funds administered by the Department address issues such as flood control, drainage, levee maintenance, groundwater, restoration and conservation.

The Department funds are generally available to public water systems, local governments, or other entities. However, many funds are not available to individual families to address household level sanitation, which can make it difficult for these families to address sanitation needs.

EXISTING PROGRAMS AND EFFORTS

The Department's programs and efforts focus on managing California's water resources. For example, every five years, the Department updates the California Water Plan: the state's strategic plan for managing and developing water resources. The plan presents the status of and trends in California's water-dependent natural resources; water supplies; and agricultural, urban, and environmental water demands for a range of plausible future scenarios. The Department last updated the Plan in 2013 and, alongside it, published a report that provided an overview of water and sanitation issues in the state ([Alarcon et al. 2015](#)).

According to the 2013 report, the Department concluded that data critical to estimating sanitation needs is not available. Specifically, the report recognized that, because there is no data available to assess if septic systems are functioning properly, there is also no statewide estimate of the

number of homes with inadequate or improperly functioning septic systems. The report also suggested that such data may become available once local agencies regulating septic tanks begin their required annual reporting, under the Board's OWTS Policy ([California Water Boards 2012, 14](#)). But gaps will remain even after these annual reports are generated, because local agencies need only report complaints, and applications to clean, repair, and install septic tanks ([California Water Boards 2012, 14](#)). There is no requirement to undertake an inventory of septic tanks, or tanks with owners who may not have the means to undertake repairs for which they seek a permit. In other words, the reports may provide data about households in a position to address failing septic tanks, but are not well suited to identify those with no ability to address the problem.

The Department's 2013 report also confirmed that "there is no statewide estimate of the population without adequate sanitation whose homes are connected to a sewer system and centralized wastewater treatment plant" ([Alarcon et al. 2015, 12](#)). Despite the Department's recognition of data shortcomings in 2013, no state agency has addressed the gaps.

B. NONPROFIT ORGANIZATIONS

Many nonprofit organizations work to ensure the state upholds its commitment to HRTW through advocacy, organizing, litigation, and technical assistance. Many gains with respect to the state's recognition and implementation of HRTW stem from their efforts. Additionally, in the absence of the state adequately ensuring HRTW, the organizations have served a quasi-governmental role by supplying vital services in underserved communities. But, as with state agencies, these organizations have devoted more effort and attention to drinking water than to sanitation,

and gaps in data have impeded progress on the sanitation front. Solutions depend on a meaningful identification of impacted communities, and of the nature and extent of the problems they face. In the absence of data, some of these organizations have either chosen not to pursue advocacy on sanitation issues, or have been forced to devote scarce resources to data collection and analysis. The following section describes the HRTW-related efforts undertaken by a non-exhaustive list of leading advocacy organizations.³⁰

California Rural Legal Assistance, Inc.

IN BRIEF:

- **Mission Statement:** “To fight for justice and individual rights alongside the most exploited communities of our society.”
- **Vision:** “A rural California where all people are treated with dignity and respect, and guaranteed their fundamental rights.”
- **Programs Addressing the Human Right to Water:** California Rural Legal Assistance’s (CRLA) Community Equity Initiative focuses on disadvantaged unincorporated communities in the San Joaquin Valley. CRLA’s work in these underserved areas includes advocating for access to basic municipal services, including drinking water and wastewater.
- **Geographic Scope:** CRLA has twenty-two offices around the state; its Community Equity Initiative focuses on the San Joaquin Valley.

OVERVIEW

CRLA is a nonprofit legal service organization founded in 1966 to help rural communities. Each year, CRLA provides legal assistance to more than 43,000 rural Californians, engages in outreach

and advocacy efforts, and provides educational workshops for residents based on community-identified needs. CRLA’s Community Equity Initiative focuses on addressing and eliminating social, political and environmental factors that negatively impact disadvantaged unincorporated communities in the San Joaquin Valley. CRLA’s work in these underserved areas includes advocating for access to basic municipal services, including drinking water and wastewater. Mindful that residents may be uncomfortable with direct engagement in the political process, CRLA structures its advocacy to build collective community power and confidence ([California Rural Legal Assistance 2017](#)).

a. Drinking Water

CRLA has litigated on behalf of communities in the San Joaquin Valley regarding California Public Records Act requests for public access to all monitoring results related to discharges of agricultural pollution, and government agency requirements under the California Safe Drinking Water Act.³¹ The organization has also engaged in state-level policy advocacy and provided public comments on water contamination issues ([Thompson 2017](#)).³²

b. Sanitation

CRLA’s work on sanitation focuses on the right of disadvantaged, unincorporated communities to enjoy full access to basic municipal services. In 2004, CRLA and the Lawyers’ Committee for Civil

³⁰ Unless otherwise indicated, the information in this section is based on interviews with the nonprofit organizations’ staff.

³¹ *Carmen Zamora et. al. v. Central Coast Regional Water Quality Control Board*, Case No. 15CV-0247 (San Luis Obispo Super. Ct. Oct. 28, 2016); *Newton-Enloe v. Horton*, 193 Cal. App. 4th 1480. (2011).

³² CRLA supported Senate Bill (SB) 244 that ensured general plans included an assessment of disadvantaged unincorporated communities, and Assembly Bill (AB) 685, which recognized the human right to water in California.

Rights of the San Francisco Bay Area filed a lawsuit on behalf of residents and two community groups in the US District Court for the Eastern District of California. The suit alleged Stanislaus County and the City of Modesto favored predominantly white areas over Latino neighborhoods in their provision of public services, particularly sewer service, police service, and bilingual assistance.³³ The district court granted the defendants' motion for summary judgment and dismissed the lawsuit. The Ninth Circuit Court of Appeals partially reversed the ruling and permitted the plaintiffs to proceed with some of their claims.³⁴ In 2011, CRLA reached a settlement with the City of Modesto and Stanislaus County: sewer projects within the Latino neighborhoods were identified as high priority and the city and county agreed to support future annexation efforts by the plaintiff neighborhoods ([California Rural Legal Assistance 2011](#)).

Clean Water Action

IN BRIEF:

- **Mission Statement:** "To protect our environment, health, economic well-being and community quality of life. Clean Water Action organizes strong grassroots groups and coalitions, and campaigns to elect environmental candidates and to solve environmental and community problems."
- **Vision:** "To win strong health and environmental protections by bringing issue expertise, solution-oriented thinking and people power to the table."
- **Programs Addressing the Human Right to Water:** Clean Water Action (CWA) engages in policy advocacy on the Human Right to

Water through several campaigns, including its "Put Drinking Water First" program. Much of its work focuses on changing policy at the state level. Besides the "Put Drinking Water First" program, the organization has four other programs: Elections and Civic Engagement; ReThink Disposable; Oil, Gas and Fracking; and Safer Chemicals.

- **Geographic Scope:** CWA is a national organization with offices in 14 states and the District of Columbia. The California Campaign is based in Oakland and has a satellite office in Kern County.

OVERVIEW

CWA was founded during a campaign to pass the landmark federal Clean Water Act in 1972. Since then, CWA has worked to win strong health and environmental protections by bringing issue expertise, solution-oriented thinking and people power to the table.

a. Drinking Water

CWA works on a broad portfolio of issues related to maintaining clean source water in California. The "Put Drinking Water First" program works to ensure Californians have access to clean drinking water. It does this by advocating in the legislature and with state and local agencies. In the legislature, CWA is heavily involved in the ongoing effort to establish a Safe and Affordable Drinking Water Fund that would provide an ongoing source of funding to operate and maintain water systems in disadvantaged communities that are otherwise unable to affordably supply safe drinking water to their residents. CWA also helped develop and pass the state's landmark Sustainable Groundwater Management Act (SB 226, Pavley, Statutes of 2015). CWA also successfully advocated for legislation to require the Board to commission a scientific report on the sources of nitrate pollution in groundwater

³³ *The Committee Concerning Community Improvement v. City of Modesto*, 583 F.3d 690, 695 (9th Cir. 2009).

³⁴ *Ibid.*, 716.

(SBX2-1, Perata, statutes of 2008), which provided the scientific basis for the ongoing effort to institute a nitrate fee as a funding source for the proposed Safe and Affordable Drinking Water fund.

CWA also engages in the public processes at state agencies to influence regulatory decisions. Key recent successes include a successful effort to lobby the State Water Board to pass a new, rigorous Maximum Contaminant Level (MCL) for 1,2,3-Trichloropropane in drinking water, and for Office of Environmental Health Hazard Assessment to review and revise its public health goal for perchlorate in drinking water.³⁵ CWA was also instrumental in advocating for the Board to adopt a state MCL for Chromium-6 in drinking water, although the new regulations are on hold following a court order as of May, 2017. Additionally, in response to advocacy by CWA and partners, the Board in 2017 newly recognized tribal cultural and subsistence fishing uses as beneficial uses of water, with the result that future updates to basin plans (the state's master water quality control planning documents) will require that these uses be identified and protected.

b. Sanitation

CWA at present does not have capacity for extensive engagement on sanitation issues.

Community Water Center

IN BRIEF:

- **Mission Statement:** "To act as a catalyst for community-driven water solutions through organizing, education, and advocacy in California's San Joaquin Valley."

- **Vision:** "All communities have access to safe, clean, and affordable water."
- **Programs Addressing the Human Right to Water:** Community Water Center (CWC) utilizes four different organizational programs to focus on drinking water funding, sustainable groundwater, resilient water systems, and community power and engagement.
- **Geographic Scope:** CWC has offices in Sacramento and Visalia; its efforts focus on the San Joaquin Valley.

OVERVIEW

Established in 2006, CWC is a nonprofit organization with the mission of "act[ing] as a catalyst for community-driven water solutions through organizing, education, and advocacy in California's San Joaquin Valley." Utilizing four different organizational programs, CWC focuses on drinking water funding, sustainable groundwater, resilient water systems, and community power and engagement. CWC's ethos is to ensure communities and residents have an opportunity to participate in the decision-making process and shape policy outcomes. CWC believes that impacted communities must drive change, and CWC works alongside impacted communities to build a movement for water justice and help empower them to engage meaningfully in the decision-making process. CWC has active community-led campaigns in eleven communities and works with several dozen other communities at different levels ([Community Water Center 2018](#)).³⁶

a. Drinking Water

CWC's Funding Access Program seeks to establish a statewide, sustainable, safe, and affordable

³⁵ 1,2,3,-Trichloropropane is a manmade chemical, typically found at industrial or hazardous waste sites, that has contaminated at least 562 drinking water sources in California ([ACLU of California 2017](#)).

³⁶ CWC is currently working in Arvin, Cutler, Ducor, East Oroshi, East Porterville, Lamont, Monson, Northern Tulare Region, Poplar, Seville, and West Goshen.

drinking water fund, and ensures that existing funding sources are reaching low-income communities. Most of this work takes place at the state level and involves legislative advocacy. Additionally, the Community Power and Engaged Leadership Program helps connect Central Valley water leaders to opportunities and resources. Specifically, the program aims to support and grow a diverse network of local water decision makers, engage voters around local water issues, and expand existing water coalitions. In 2016, as part of the Agua4All coalition, CWC helped secure the installation of over sixty water stations and point-of-use filters in south Kern County.

CWC has also helped develop the Association of People United for Water Coalition (AGUA) and the Community Water Leaders Network as part of its Community Power and Engaged Leadership Program. AGUA is a regional, grassroots coalition formed in response to widespread contamination of valley drinking water sources. The coalition includes fifty-four members from twenty-four impacted communities and eleven nonprofit organizations. Run by a coordinating council comprised of representatives from each community, AGUA meets monthly, and members vote on campaign activities, events, coalition governance, and finances. The Community Water Leaders Network is a leadership cohort that focuses on the power of local water boards to help increase access to safe, clean, and affordable drinking water in the San Joaquin Valley.

CWC's Sustainable Groundwater Program engages with regional water boards to regulate source contamination and maintain safe levels of nitrates. This work also involves working on regional governance structures for drinking water and paying particular attention to both water quality and water supply.

During the 2017-2018 legislative session, CWC successfully sponsored Assembly Bill 560 (Salas). The bill broadens the guidelines for the Drinking Water State Revolving Fund (DWSRF) to allow larger systems with service areas in severely disadvantaged communities to apply for grant funding, where paying off a loan would require the system to charge an unaffordable water rate—defined as a water bill that is 1.5 percent of the median household income of the service area.³⁷

During the 2017-2018 legislative session, CWC is sponsoring Senate Bill 623, which, if approved, would create a Safe and Affordable Drinking Water Fund to ensure universal access to safe and affordable drinking water in California. For years, CWC and other drinking water advocates have called for a new sustainable funding source to support safe drinking water needs, because existing funding sources cannot be used to support critical drinking water treatment needs, such as ongoing operations and maintenance.

b. Sanitation

CWC has not yet been able to replicate its drinking water successes on the sanitation side of HRTW. The biggest barrier to CWC's advocacy on sanitation issues is the lack of data collection and analysis needed to identify the scope of the problem. Without a comprehensive tracking program, CWC cannot match specific communities with the resources they need or meaningfully engage in the development of equitable governance structures at the regional level. Until that information is available, CWC will likely continue to advocate exclusively on behalf of community drinking water needs.

37 Cal. Assemb. Bill 560, 2017-2018 Reg. Sess., ch. 552, (Cal. 2017) *codified as* Cal. Health & Saf. Code, § 116760.50.

Environmental Justice Coalition for Water

IN BRIEF:

- **Mission Statement:** “To educate, empower, and nurture a community-based coalition that serves as a public voice and an effective advocate for environmental justice issues in California water policy.”
- **Vision:** “We envision all communities throughout California having access to safe and affordable water, clean rivers, streams, and bays for personal, cultural, ceremonial, and recreational uses.”
- **Programs Addressing the Human Right to Water:** Environmental Justice Coalition for Water (EJCW) works on statewide initiatives and focuses on local governance and public education. Its AB 685 campaign addresses HRTW issues throughout the state.
- **Geographic Scope:** EJCW is a statewide network of members who organize themselves around regional environmental justice issues. They have an active presence in nearly all water quality control regions in the state.

OVERVIEW

Established in 1999, the EJCW is a statewide network of members who organize themselves around regional environmental justice issues. As an organization, EJCW prioritizes local governance, public education about environmental issues, and water equity: ensuring all communities have a fair share of water resources ([Cooley et al. 2016, 7](#)). EJCW’s work on HRTW focuses on statewide initiatives, organized by the nine Regional Water Quality Control Board locations. Their work pays particular attention to water resource safety, affordability, and accessibility. EJCW has an active presence in nearly all water quality control regions ([Environmental Justice Coalition for Water 2017](#)).



Source: Sarah Craig

Many community members rely on water wells that are contaminated by nitrate, making their only source of water unfit to drink. EJCW is currently providing low-income families with bottled water delivered to their homes, while also working towards a long-term solution.

a. Drinking Water

EJCW assists residents throughout California with drinking water issues. In 2015, EJCW launched a pilot program to assist Central Coast Region communities with wells affected by salinity and nitrate contamination. The project helped communities apply for grants to drill new wells or build infrastructure to connect to municipal systems, and in some cases arranged for delivery of bottled water ([California Institute for Rural Studies 2015](#)). EJCW has also worked with groups to limit pollution and toxic dumping in the San Francisco Bay Region, improve water affordability statewide, and strengthen 1,2,3-Trichloropropane

regulations in the Central Valley Region.³⁸ EJCW is currently developing a centralized call-in system for residents in the San Francisco Bay Region to receive information about water shut-offs.

b. Sanitation

EJCW's sanitation work focuses on populations experiencing homelessness, particularly in the city of Sacramento and the Los Angeles, San Joaquin Valley, Santa Ana, and San Diego Regions. One key component of EJCW's work is to conduct a cost-benefit analysis of providing clean bathrooms and showers in areas where residents are experiencing homelessness. EJCW has found that the most difficult aspect of its work on HRTW is bridging the gap between affected communities and decision-makers.

Leadership Counsel for Justice and Accountability

IN BRIEF:

- **Mission Statement:** "To maximize the impact of non-profit organizations, develop their leaders and strengthen the community."
- **Vision:** "Inspired, visionary leaders champion dreams of those we collectively and collaboratively serve in a thriving community."
- **Organizational goals:** "(1) ensuring that processes, programs and policies do not disadvantage, but rather benefit, low income communities of color; (2) holding decision-makers accountable to these communities; and (3) ensuring inclusion of rural regions in programs and decisions related to land use, water, environment, climate change, transportation, housing, and investment."

³⁸ The work EJCW engages in within the Colorado River Basin does not directly fall under the human right to water and sanitation factors.

- **Programs Addressing the Human Right to Water:** The Leadership Counsel for Justice and Accountability (LCJA) engages in policy advocacy through its Safe Drinking Water and Wastewater program to address the human right to water.
- **Geographic Scope:** The organization is currently leading projects throughout the San Joaquin and Eastern Coachella Valleys.

OVERVIEW

LCJA is a nonprofit organization that advocates for greater investment and protection of historically neglected communities. Through community organizing, research, legal representation, and policy advocacy, LCJA seeks to impact land use and transportation planning, shift public investment priorities, guide environmental policy, and promote the provision of basic infrastructure and services ([Leadership Counsel for Justice and Accountability 2017](#)). The organization is currently leading projects throughout the San Joaquin and Eastern Coachella Valleys. LCJA works in partnership with community leaders from approximately twenty-five communities and neighborhoods at the local, county, and state levels. LCJA works with countywide and regional planning agencies, including local agency formation commissions responsible for approving extension of service requests – a critical application process for small communities that have a difficult time obtaining services.³⁹

a. Drinking Water

For both drinking water and sanitation, LCJA has undertaken a number of projects to (1) protect against pollution and depletion of groundwater and drinking water sources, especially nitrate contamination from agricultural discharges; (2) secure safe and affordable

³⁹ See Cal. Gov't Code § 56133(b).

drinking water to communities through the state; and (3) implement land use planning policies that prioritize service to communities without adequate service. In July 2015, LCJA successfully sued the City of Tulare on behalf of the Matheny Tract Community, an unincorporated area of 1,200 residents, to require the city to consolidate the two water systems.⁴⁰ LCJA is currently working on approximately ten consolidation projects. The organization's statewide work includes a campaign to secure a safe and affordable drinking water fund and various measures to mandate and incentivize local land use and governance practices that promote the provision of drinking water.

b. Sanitation

In light of its success on the drinking water side and the severe need for reliable wastewater service throughout its service region, LCJA is working on several potential consolidation opportunities for wastewater systems. At the statewide level, LCJA advocates for funding for consolidations and septic system repair, in addition to legislative measures to facilitate, incentivize, or mandate consolidations under certain circumstances. Finally, LCJA is working on policy and research solutions to wastewater service deficits, and to address severe data gaps on wastewater infrastructure access and adequacy.

LCJA has found the wastewater work presents unique challenges. Many residents in its service region rely on septic tanks. According to the organization, significant data gaps make it difficult to accurately identify existing needs, and there are few funding sources for certain residents. Residents of mobile home parks, who often face the most critical wastewater-related public health threats, are particularly vulnerable.

Rural Community Assistance Corporation

IN BRIEF:

- **Mission Statement:** "Rural Community Assistance Corporation (RCAC) provides training, technical and financial resources, and advocacy so rural communities can achieve their goals and vision."
- **Vision:** "RCAC envisions vibrant, healthy and enduring rural communities throughout the West."
- **Programs Addressing the Human Right to Water:** RCAC's programs address HRTW through training, financial assistance, and individual household assessments.
- **Geographic Scope:** Headquartered in West Sacramento, RCAC serves rural communities statewide and throughout the western United States.

OVERVIEW

Founded in 1978, RCAC provides environmental assistance, training, technical and financial resources, and advocacy to rural communities in thirteen states ([Rural Community Assistance Corporation 2017](#)). RCAC's work focuses on environmental infrastructure, affordable housing development, economic and leadership development, and community development finance. The organization's Community and Environmental Services programs utilize a variety of approaches to create sustainable water, wastewater, and solid waste systems in small, low-income communities in rural areas throughout the state of California. The organization is currently working with over 100 different communities throughout the state with the help of state, federal, and private funding.⁴¹

⁴⁰ *City of Tulare v. County of Tulare*, Case No. VCU261091 (Tulare County Super. Ct. June 3, 2015).

⁴¹ A non-exhaustive list of RCAC's active projects include work in: Armona (Kings County), Arvin (Kern), Barstow

a. Drinking Water

RCAC is currently involved in a number of projects aimed at drinking water. Most recently, RCAC assisted the Yurok Tribe in providing safe water to students ([Zach 2017](#)). As a member of the Agua4All coalition, RCAC provides bottle-filling stations at schools, parks, and community centers in rural communities. In addition to providing clean, filtered water in areas experiencing contamination, the program also encourages people to drink more water, raises awareness about California drinking water, and locates funding for sustainable solutions to drinking water quality and accessibility problems.

RCAC identifies whether a new well is needed and whether the homeowner is eligible for grants or loans to replace their existing well. In addition, RCAC encourages small water systems to collaboratively identify shared needs and opportunities to become more sustainable and cost-efficient through economies of scale.

b. Sanitation

RCAC's water and wastewater programs help communities and utilities improve their wastewater and drinking water services. In addition to providing workshops and trainings on how to build, improve, manage, operate, and finance drinking water or wastewater systems, RCAC staff help communities access grant and loan money. The water and wastewater programs also provide technical assistance on federal Safe Drinking Water Act and Clean Water Act compliance. This ensures small utilities have

the information and experience they need to effectively manage their systems.

In recognition of existing data gaps, and as part of its technical assistance, RCAC conducts median household income surveys for a drinking water or wastewater service area where the available data is potentially an inaccurate representation of the community. The results are used to determine the community's eligibility for various federal and state grant and loan programs. RCAC also conducts rate studies, reviewing utility operation information to determine projected costs over a five-year period. The process assesses real operating costs and capital improvement needs and presents alternative rate structures for local governance board consideration and adoption.

Self-Help Enterprises

IN BRIEF:

- **Mission Statement:** "To work together with low-income families to build and sustain healthy homes and communities."
- **Programs Addressing the Human Right to Water:** Self-Help Enterprise's (SHE) Community Development Program focuses on safe drinking water, sanitary sewer systems, and small community leadership development.
- **Geographic Scope:** SHE's service area is comprised of eight counties in the heart of the San Joaquin Valley: Fresno, Kern, Kings, Madera, Mariposa, Merced, Stanislaus, and Tulare.

OVERVIEW

SHE is a community development organization that works with low-income families to help build and sustain healthy homes and communities. Since opening in 1965, SHE's community-based programs have helped provide homeownership

(San Bernardino), Campo (San Diego), Colton (San Bernardino), Klamath (Del Norte), Le Grand (Merced), Lewiston (Trinity), Santa Rosa (Sonoma), Thermal (Riverside), Matheny Tract (Tulare), and West Sacramento (Yolo).



Source: Self-Help Enterprises

After many struggles with a dry well and poor water quality due to high nitrates, Lazara “Lala” Luengas now has clean and reliable water flowing to her home in Monson, a rural Tulare County community where a new well and water system bring water to residents’ homes.

education, counseling, and technical assistance to residents living in the eight counties in the San Joaquin Valley (Fresno, Kern, Kings, Madera, Mariposa, Merced, Stanislaus, and Tulare). SHE conducts community surveys to identify resident concerns and determine their economic status. SHE has worked directly with residents in over 200 communities, targeting assistance to disadvantaged communities and focusing on community-identified needs.

a. Drinking Water

SHE prioritizes community engagement to ensure residents are involved with planning, policy, and project development at both the community and local levels. SHE assists community groups with developing water projects to resolve water quality and infrastructure issues, and aids with water well sampling whenever necessary. Funding for sustainable drinking water solutions, such as drilling new wells, is severely limited, but

SHE provides no-cost bottled water delivery to residents without clean drinking water. Using its technical expertise, SHE assists communities in the preparation of funding applications and helps administer government loans and grants for the projects if financing is approved. SHE also encourages water system consolidations when they are fair and equitable. In such cases, SHE assists communities water and/or sewer service from the providers.

b. Sanitation

SHE also helps community boards develop sewer projects. SHE helps conduct septic system surveys as part of preparing water quality investigations, and, when necessary, assists communities in the development of wastewater projects and district formation. SHE also uses Proposition 1 funding to prepare preliminary engineering reports and

environmental documents.⁴² This subcontracted work can expedite projects and allow them to move forward without waiting for individual community planning and funding agreements with the state.

C. EDUCATIONAL INSTITUTIONS

Universities conduct important research that leads to policy solutions to public problems. The University of California, Davis (UC Davis) and the University of California, Los Angeles (UCLA) house research institutions that focus on environmental justice, including HRTW. Both institutes have conducted research focused on drinking water issues, but neither has devoted significant attention to sanitation.

UC Davis Center for Regional Change

IN BRIEF:

- **Goal:** The UC Davis Center for Regional Change’s (CRC) goal is to support the building of healthy, equitable, prosperous, and sustainable regions in California and beyond.
- **Location:** CRC is housed within and with core support from the UC Davis College of Agricultural and Environmental Sciences.

OVERVIEW

CRC is a research institute at UC Davis that provides information to educate the public, inform policy makers and planners, and benefit disadvantaged people and places. Launched in

2007, CRC’s initiatives explore environmental justice, civic engagement, opportunities for investment in underserved communities, and the distribution of information resources to youth and adult advocates throughout the state. CRC’s work on HRTW focuses primarily on water supply and water quality in underserved areas throughout the state. Currently, CRC is not working on sanitation issues.

In November 2011, CRC published “Land of Risk/Land of Opportunity” ([London et al. 2011](#)). The report documented the high levels of water contamination and poor air quality confronting San Joaquin Valley residents. Using the Cumulative Environmental Vulnerabilities Assessment—an assessment tool that considers environmental hazards, social vulnerability, and health—CRC identified the locations and populations within the San Joaquin Valley that are at greatest risk and that require immediate protection ([London et al. 2011, 20](#)). Two years later, CRC followed up this research with the report, “Revealing the Invisible Coachella Valley” ([London et al. 2013](#)). The report highlighted the elevated, and inequitable, levels of drinking water contamination and other environmental hazards faced by residents in the Eastern Coachella Valley.

More recently, CRC has published reports about unique health consequences for children in the San Joaquin Valley, the use of technology to improve environmental monitoring, reporting, and enforcement throughout the state, and using land use history to analyze drinking water challenges in disadvantaged unincorporated communities in the San Joaquin Valley ([UC Davis Center for Regional Change 2017](#); [Jatkar and London 2015](#); [London et al. forthcoming](#)). These reports continue to demonstrate the need for intervention to improve the lived experience of residents throughout environmentally burdened

⁴² SHE helps prepare documents required under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). NEPA requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions ([US EPA 2017](#)). CEQA requires state and local agencies to identify significant environmental impacts and avoid or mitigate those impacts where feasible ([California Natural Resources Agency 2017](#)).

areas in the state, but there is still more research to complete. To date, there is no reliable way to determine who is on sewer and who is on septic, which limits the research CRC, or others, may undertake. Additionally, available data concerning HRTW is not in one centralized location. Difficulty locating pertinent information ultimately makes it less accessible for researchers, policy makers, and advocates who rely on that information for their work.

UCLA Luskin Center for Innovation

IN BRIEF:

- **Goal:** The goal of the UCLA Luskin Center for Innovation (Luskin) is to unite UCLA scholars with forward-looking civic leaders to address the most pressing issues confronting our community, nation, and world.
- **Location:** Luskin convenes faculty and staff from a variety of academic disciplines across the UCLA campus to conduct research in partnership with civic leaders who use the knowledge to inform policy and organizational innovations.
- **Projects Addressing the Human Right to Water:** Luskin's Sustainable Water Initiative works on access to safe, affordable drinking water, household water consumption and conservation behavior, water system vulnerabilities, water-energy nexus, and urban greening and eco-system valuation.

OVERVIEW

Luskin is a research institution at UCLA that focuses on innovative solutions for policy problems throughout the state ([Luskin 2017](#)). Luskin's current initiatives explore advanced transportation technology, renewable energy, greenhouse gas reduction, and environmental sustainability. Its research provides methods

for creating sustainable water systems and encouraging better water use behavior.

Luskin's work on HRTW focuses primarily on drinking water equity issues in Los Angeles County. Recently, Luskin conducted research on secondary drinking water contamination and the relationship between use of tap water and the perception that it is unsafe ([Pierce and Gonzalez 2017](#)). The State Water Resources Control Board contracted with Luskin to assist in the development and design of the State's Low-Income Rate Assistance program, a program which, when finalized, will provide low-income water rates to residents who meet the requirements.⁴³ Since at least 2016, Luskin has been researching and developing the most effective way to fund and implement uniform administration of water to residents throughout California. Luskin has also authored a report about county involvement in water consolidations. The report indirectly assisted efforts to consolidate small systems throughout the state to make water administration more cost effective ([Lai 2017](#)).

Luskin has also authored two reports highlighting specific water vulnerabilities. The first analyzed disparities in water service reliability in mobile home parks. The report concluded that living in a mobile home unit correlates significantly with water service unreliability ([Pierce and Jimenez 2015](#)). The second was a comprehensive assessment of Los Angeles County water systems. It included a review of system supply vulnerabilities, at-risk populations, conservation opportunities, and customer assistance programs ([Pierce and McCann 2015](#)). Moving forward, Luskin plans to expand its earlier research and quantify the relationship between water security and socioeconomic disadvantage in US mobile home parks.

⁴³ See Cal. Wat. Code, § 189.5.

IV. RECOMMENDATIONS

Fully realizing HRTW in California demands that attention and resources be devoted to both drinking water and sanitation issues.⁴⁴ While both drinking water and sanitation require far more resources and effort than they are currently attracting, the situation is particularly acute with respect to sanitation, which has attracted less funding, attention, and advocacy. To alleviate this imbalance, we recommend the following changes to the way the state approaches HRTW issues. These changes will, in turn, enable advocacy organizations to focus increased attention on sanitation issues.

1. FULLY IMPLEMENT THE HUMAN RIGHT TO WATER

State agencies should not only “consider” HRTW but also carry out its principles, including when it comes to funding decisions. In addition, Section 106.3’s mandate should be an explicit part of the decision-making process in all agencies that deal with water issues, or whose activities affect water, not just the Board and the Department. If the statutory obligation must be enhanced in order for state agencies to implement the principles of HRTW, this can be done by amending Section 106.3(b) to read: “All relevant state agencies ... shall ~~consider~~ implement this state policy when revising, adopting, or establishing policies, regulations, funding, and grant criteria”

2. MAKE THE RIGHT TO SANITATION EXPLICIT

The framework of Section 106.3 was derived from the United Nations’ approach to recognizing the human right to water and sanitation. In the international context, lacking safe drinking water and lacking access to basic sanitation are

two equal and important aspects of living with dignity. California, as the first state to recognize HRTW, should go a step further and explicitly recognize the human right to sanitation. This could be accomplished by amending Section 106.3 to declare that “every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption and cooking, and to adequate sanitation.”

3. INCREASE DATA COLLECTION AND AVAILABILITY TO THE PUBLIC

Efforts to address deficiencies in drinking water and sanitation systems are hampered by a lack of information, but the gaps are particularly problematic with respect to sanitation. This is partly due to the fact that necessary data is not yet being collected, and partly because the data that is collected is not readily accessible.

Currently, there is no reliable, centralized information concerning small-scale sanitation systems such as septic tanks. Although local agencies will begin reporting some data on septic tanks, this data will focus on reported complaints, and applications to clean, install, or replace septic tanks ([California Water Boards 2012, 14](#)); such anecdotal data would still not provide a comprehensive inventory of existing or failing tanks. Overall, septic tanks are less reliable and less closely regulated than centralized wastewater systems, making communities who rely on them the most vulnerable to improperly functioning waste management. Pinpointing the areas in which these systems are concentrated and where they are failing is crucial to developing a plan of action for replacing or repairing substandard systems.

The Board and Department should collaborate with local jurisdictions and regional and local agencies to ensure that such data is collected, that it is collected consistently, and that once collected,

⁴⁴ See Cal. Wat. Code, § 106.3(a).

it is centrally available. In addition, the wastewater data already reported to the Department by urban water suppliers as part of their urban water management plans should be made available on the state's Human Right to Water Web Portal, in the same way that drinking water system information is currently being provided.⁴⁵ Until comprehensive sanitation information is collected and disseminated, policy makers, nonprofits, and citizens will be deprived of information they require to develop and advocate for system improvements, and advocacy organizations will have to divert resources to data collection that should be performed by governmental agencies.

given the hundreds of thousands of Californians who lack complete plumbing, funds should also be available for in-home sanitation infrastructure ([Feinstein et al. 2018](#)).

4. INCREASE ACCESS TO FUNDING TO ADDRESS HOUSEHOLD-LEVEL SANITATION NEEDS

Individual households are unable to access existing funding mechanisms to address in-home infrastructure or septic tanks, in large part because the funding mechanisms focus on public water systems. Although the Board has authorized local agencies to apply to create septic tank loan programs for private homeowners with CWSRF funds, no agency has done so as of the time of the publication of this report, and as a result, homeowners have not yet been able to access these funds. This suggests the need for a different mechanism that would provide individual households with meaningful access. In addition,

⁴⁵ An "urban water supplier" is a supplier that provides water for municipal purposes, either directly or indirectly, to more than 3,000 customers (or supply more than 3,000 acre-feet of water annually). Cal. Wat. Code, § 10617. *See* Cal. Wat. Code, § 10615 (defining urban water management plan to "describe and evaluate sources of supply reasonable and practical efficient uses, reclamation and demand management activities"); Cal. Wat. Code, § 10633(a) ("the plan shall provide... A description of the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.").

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ACLU

Northern
California

ACLU Foundation of Northern California

39 Drumm Street

San Francisco, California 94111

Phone: 415.621.2493 | Facsimile: 415.255.1478

TTY: 415.863.7832



Pacific Institute

654 13th Street, Preservation Park

Oakland, California 94612

Phone: 510.251.1600 | Facsimile: 510.251.2203

www.pacinst.org

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