



Rural Water Issues: Progress and Challenges in Implementing California's Human Right to Water

State Environmental Justice Training Webinar

Community Water Center

California Water Resources Control Board

Office of Environmental Health Hazard Assessment, CalEPA

October 8, 2019

Introduction

- **State Environmental Justice Training Webinar Series**
- **Rural Water Issues: Progress and Challenges in Implementing California's Human Right to Water**
- **Important Logistical Information**

[https://www.epa.gov/environmentaljustice/
state-and-local-government](https://www.epa.gov/environmentaljustice/state-and-local-government)



Charles Lee

Senior Policy Advisor for Environmental Justice
U.S. Environmental Protection Agency

Moderator

Susana De Anda

Executive Director and Co-Founder
Community Water Center





Frontline Communities Shaping California Policy

Susana De Anda, Executive Director & Co-Founder



COMMUNITY WATER CENTER
EL CENTRO COMUNITARIO POR EL AGUA

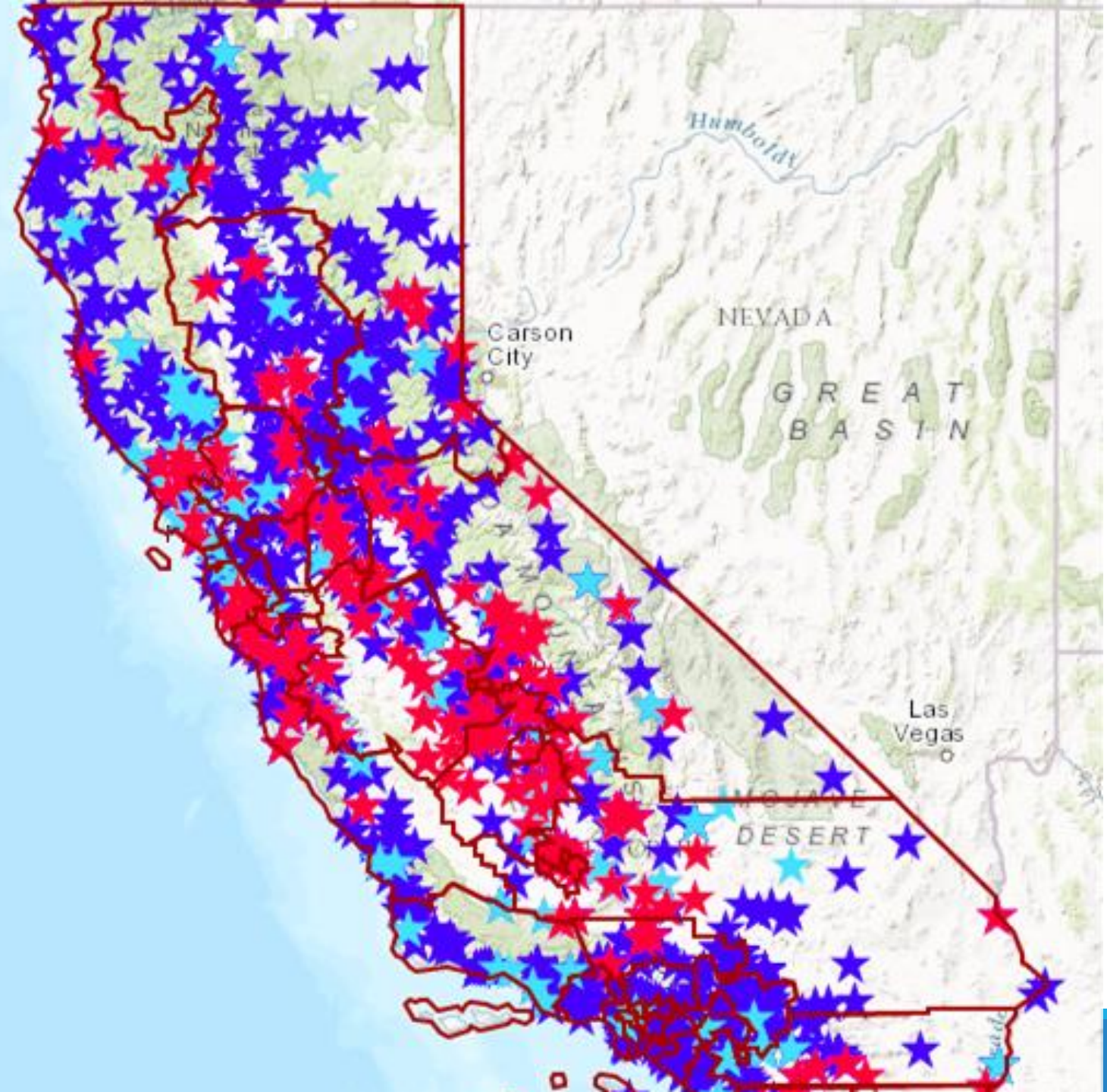


Our Mission

Act as a catalyst for community water solutions through organizing, education and advocacy in California.



Over one million Californians
are exposed to unsafe drinking water
each year



More than 1 million Californians impacted by unsafe drinking water each year


Living without a drop of safe water to drink





Many residents spend up to 10%
of their household income on
drinking water.

Pacific Institute 2011



Arsenic and nitrate drinking water contamination disproportionately impacts **low-income and Latino communities**

Balazs et al. 2011



Got Nitrates?

E-erosi
Water.

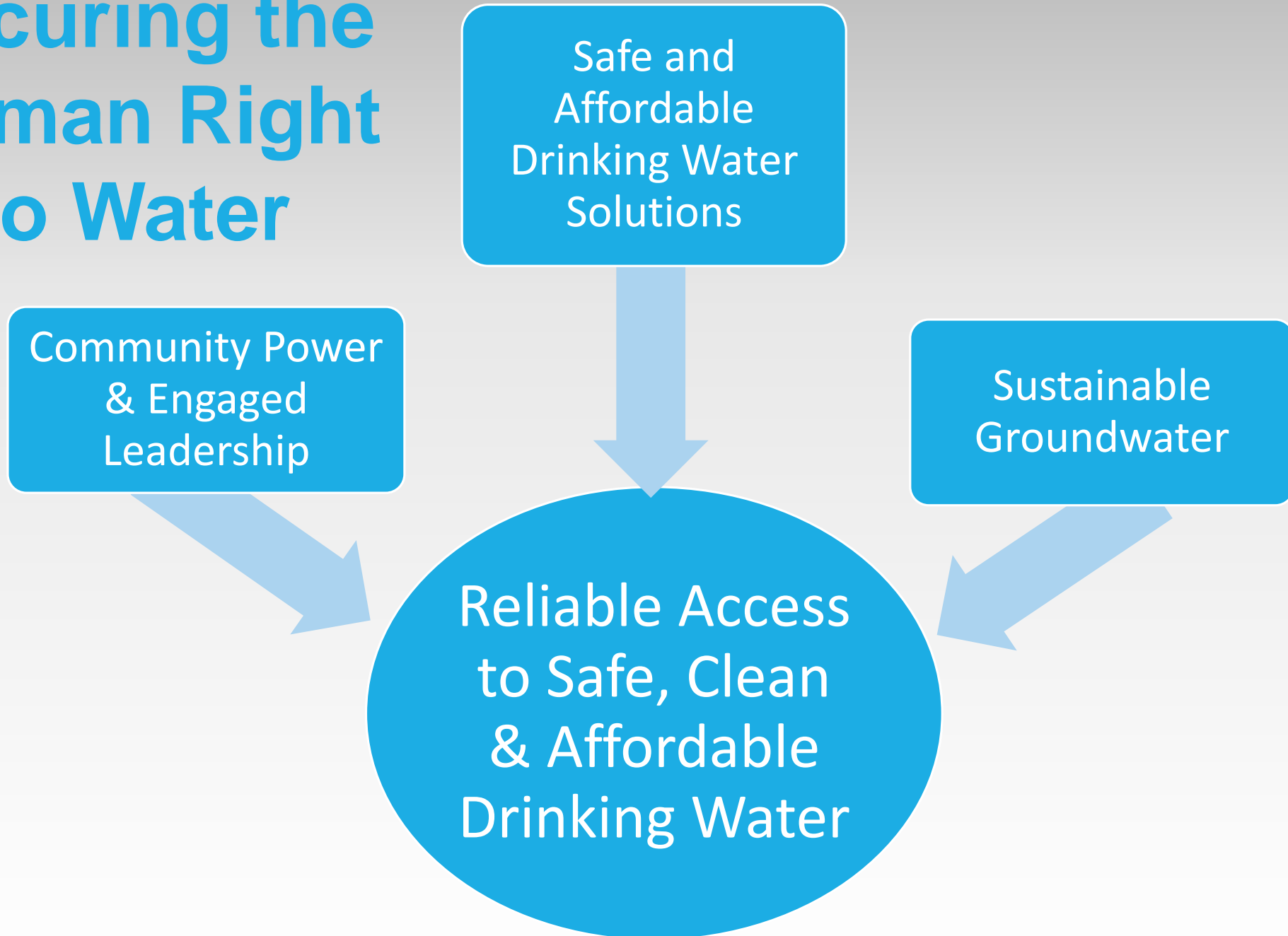
AGUA
de
DUCOR







Securing the Human Right to Water



Human Right to Water Act (2012)

“Every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.”



The Sustainable Groundwater Management Act (SGMA) 2014

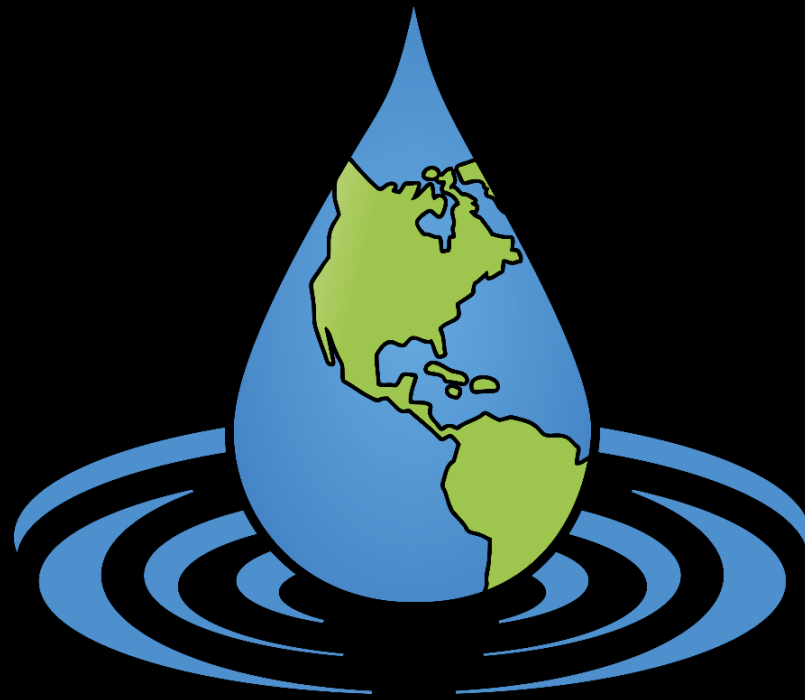


Safe and Affordable Drinking Water Fund 2019





Thank you!



... Because clean water is a human right, not a privilege.

www.communitywatercenter.org

(559) 733-0219





E. Joaquin Esquivel

Chair

**California Water Resources
Control Board**



Human Right to Water

E. Joaquin Esquivel

Chair, California State Water Boards



CALIFORNIA

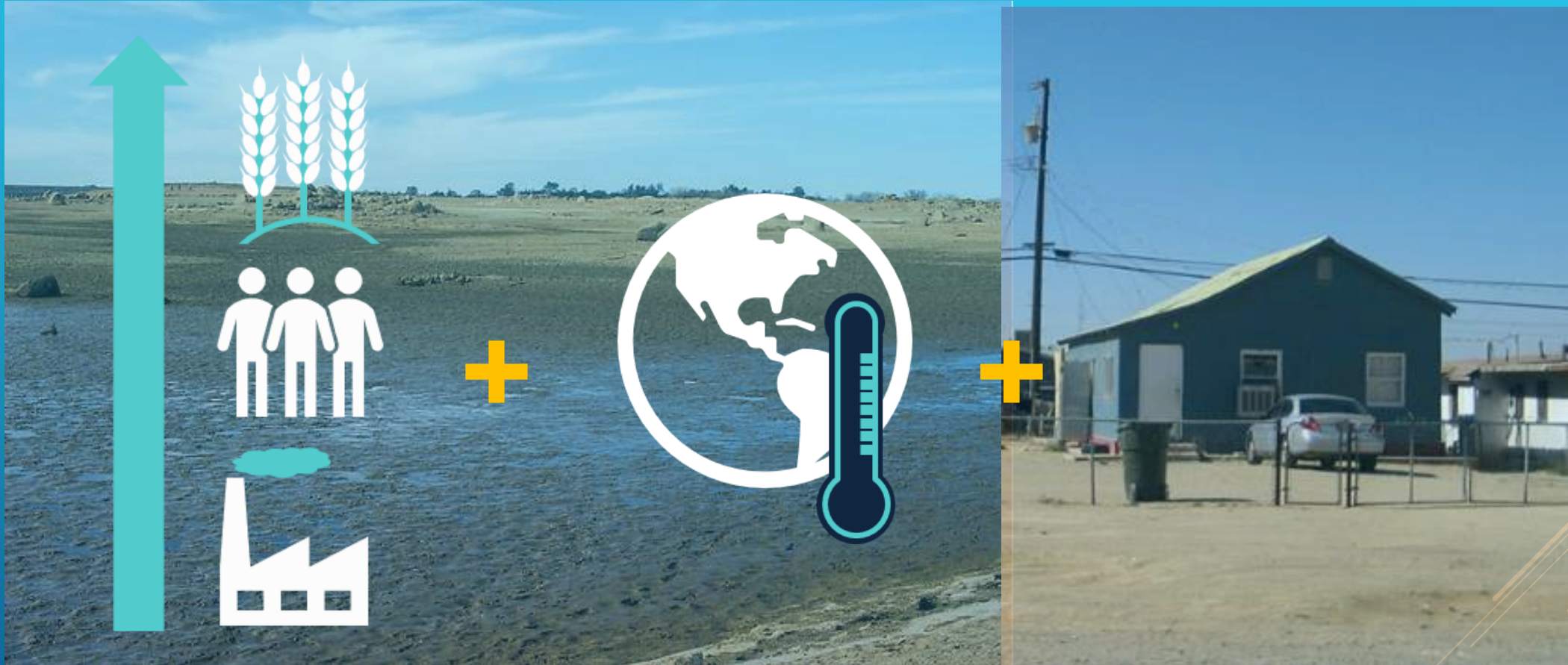
Water Boards

STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

Background



Challenges



**Greater Demands on
WATER RESOURCES**

**Impacts from
CLIMATE CHANGE**

**Rising
INCOME INEQUALITY &
DISADVANTAGED UNINCORPORATED
COMMUNITIES**

Impacted Communities

SAFE DRINKING WATER

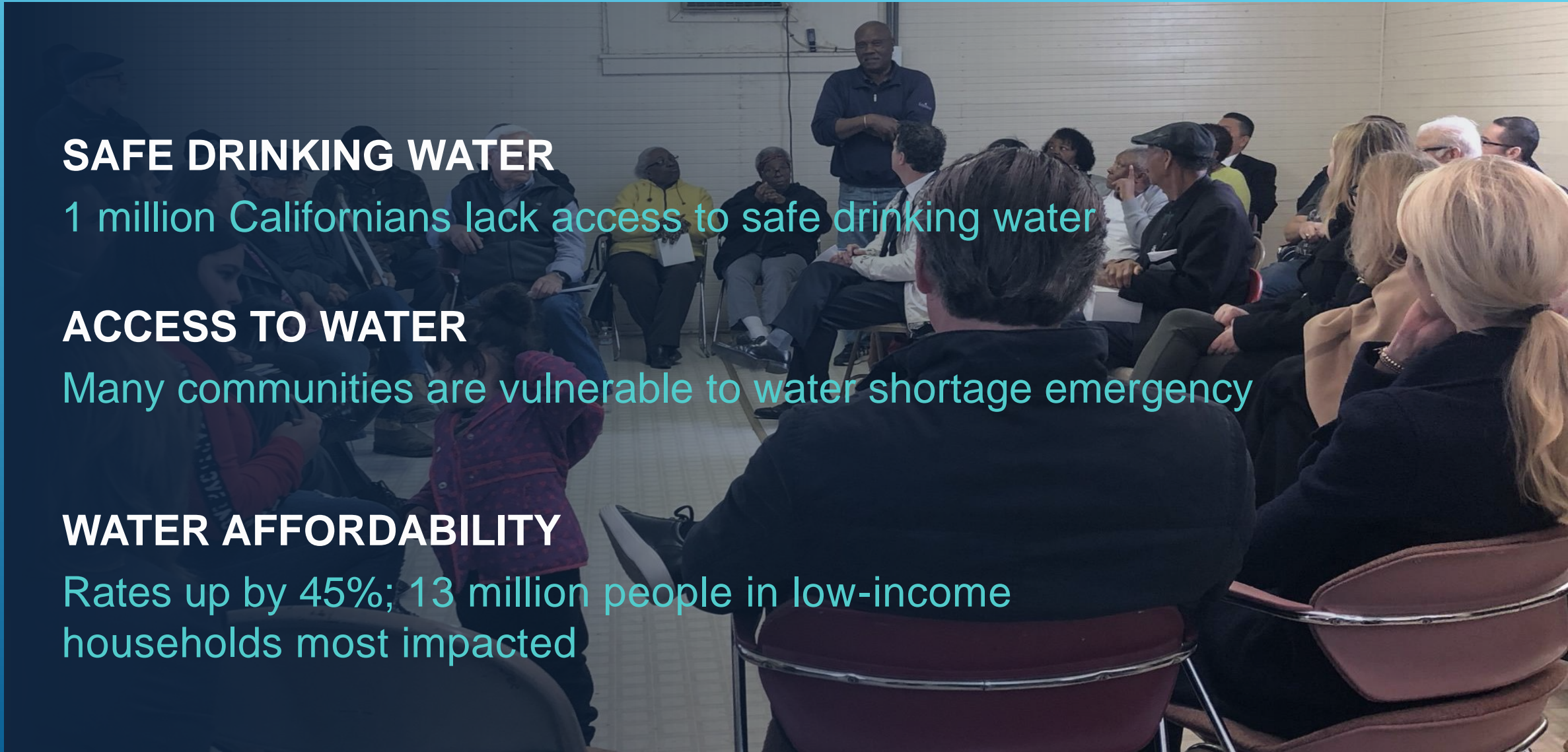
1 million Californians lack access to safe drinking water

ACCESS TO WATER

Many communities are vulnerable to water shortage emergency

WATER AFFORDABILITY

Rates up by 45%; 13 million people in low-income households most impacted



Funding Resources

INTERIM ASSISTANCE

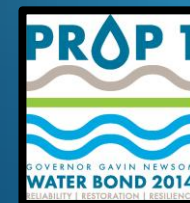
Emergency drinking water

CAPITAL FUNDING

Planning and construction projects

TECHNICAL ASSISTANCE

State Revolving Fund and Prop 1



Lanare

Small Severely Disadvantaged Community

- 660 people
- 153 connections
- Two wells

Arsenic Treatment System

- Operated for one year
- Lacked capacity to operate



SOLUTIONS FOR LANARE



**DDW PETITIONED COURT
2009**

**COURT APPOINTED RECEIVER
2010**

**EMERGENCY FUNDING
>\$43,000**

**PLANNING GRANT
>\$386,000**

**BOTTLED WATER
>\$500,000**

**CONSTRUCTION GRANT
\$7 million**

2018 CONSOLIDATIONS

VOLUNTARY CONSOLIDATION

- 41 physical consolidations
- 6 managerial consolidations

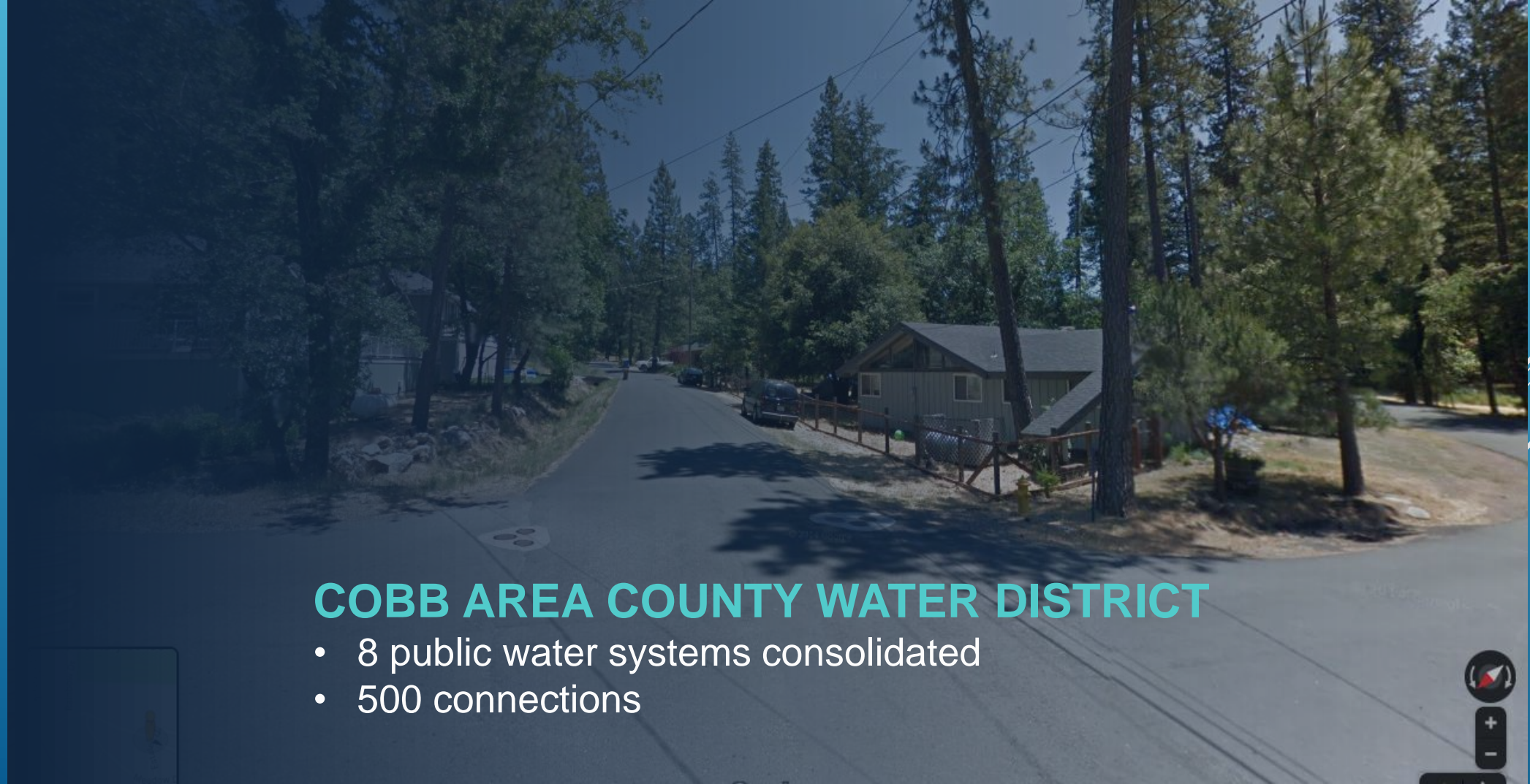
MANDATORY CONSOLIDATION

- 2 mandatory consolidation orders issued
- 2 consolidations initiated
- 3 public meetings, 3 public hearings



COBB CONSOLIDATION

Mountain Water Systems



COBB AREA COUNTY WATER DISTRICT

- 8 public water systems consolidated
- 500 connections

Replacement Water

Tulare Area

- 8 kiosks over the next year

- Installed by Kings, Tule, & Kaweah coalitions established for group compliance for monitoring requirements

- Provides safe drinking water for up to 24,000 consumers



What do Interim Solutions Look Like?

Salinas



- Bottled water only source
- Application required
- Non-compliant well required
- Testing data public

Tulare



- Kiosk main source
- Can request bottled
- No ID required to use kiosk

Community Input

????

Is bottled water reaching everyone affected?

Is kiosk too difficult to use?

Are there economic impacts affecting someone's ability to reach the kiosk?

Would *per person* or *per area* solutions be ideal?



Low-Income Water Rate Assistance Act (AB 401)

Draft Report Released
January 2019

- Assistance options for
13 million low-income
Californians



Water Affordability

- Cost of water continues to rise
- Households struggle to afford basic tap water, housing, food, other utilities, and healthcare
- 13 million people with incomes at or below 200% below federal poverty level <\$50,200 (2018)



CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD

HRTW EFFORTS

ENFORCEMENT

Regional and State Board staff worked cooperatively to develop settlement agreement and process for provision of replacement water by agricultural operators.

INFORMATION TRANSPARENCY

Region 3 is committed to developing information including testing data

PUBLIC OUTREACH

Region 3 is utilizing available funds for domestic water well testing region wide

LONG TERM SOLUTIONS

Region 3 is developing a permit that seeks to reduce nitrate impacts to groundwater



HUMAN RIGHT TO WATER PORTAL

https://www.waterboards.ca.gov/water_issues/programs/hr2w/

The screenshot shows the homepage of the Human Right to Water Portal. At the top, there is a navigation bar with icons for Board, Programs, Drinking Water, Water Quality, Water Rights, Notices, and Water Boards. Below this is a banner with the text "HUMAN RIGHT TO water PORTAL" and the tagline "safe & clean. affordable. accessible." The main content area features a breadcrumb trail: Home | Water Issues | Programs | Hr2w. A paragraph of text states: "On September 25, 2012, Governor Edmund G. Brown Jr. signed Assembly Bill (AB) 685, making California the first state in the nation to legislatively recognize the human right to water." Another paragraph explains that the right is now in the Water Code as Section 106.3. Below this is a section titled "What's New" with tabs for General Information, Graphics, Water Maps, Water Data, and Funding. The "General Information" tab is active, displaying a list of updates made to the Portal tabs as of 6/07/2019. To the right of the updates is a "Contact Us" section with phone and email information, and a "Partners" section with a "Thank You For Your Contributions" message and logos.

CALIFORNIA WATER BOARDS
State Water Resources Control Board

Board Programs Drinking Water Water Quality Water Rights Notices Water Boards

HUMAN RIGHT TO water PORTAL
safe & clean. affordable. accessible.

Home | Water Issues | Programs | Hr2w

On September 25, 2012, Governor Edmund G. Brown Jr. signed Assembly Bill (AB) 685, making California the first state in the nation to legislatively recognize the human right to water.

Now in the Water Code as Section 106.3, the state statutorily recognizes that "every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes." The human right to water extends to all Californians, including disadvantaged individuals and groups and communities in rural and urban areas. [Show More](#) | [Show Less](#)

What's New | **General Information** | Graphics | Water Maps | Water Data | Funding

The following is a list of updates that have been made to the Portal tabs as of 6/07/2019:

- General Information tab:
 - Added press release: Governor Newsom Signs Bill Creating Safe Drinking Water Fund
 - Added fact sheet: SB 200 Closes Funding Gap to Provide All Californians with Access to Safe and Affordable Drinking Water
 - Added link to North Coast (Region 1) Resolution
 - Added new Water System Success Story- Hillview Water Co.

Contact Us

Phone: (916) 449-5158
Email: hr2w@waterboards.ca.gov

Partners

Thank You For Your Contributions

DATA AND TRANSPARENCY



- OEHHA Human Right to Water Report and Tool (change over time)



- SB200 Implementation
 - Resources and timelines
- Electronic Annual Report



- Rates
 - Supply reliability
- Needs Assessment



- Technical, managerial, and financial capacity metrics

MOVING FORWARD





CalEPA
Partnerships Regional Boards
OEHHA **Executive Order**

HRTW NGOS
SOGS

COMMUNITY

Interim Solutions
Office of Enforcement
Office of Public Participation

SB 200

Office of Sustainable Water Solutions
Division of Financial Assistance

AB 401
SB 88

Division of Drinking Water

SADW

Dr. Carolina Balazs

Research Scientist

**Office of Environmental Health
Hazard Assessment, CalEPA**





Achieving the Human Right to Water in California

Assessing the State's Community Water Systems

Carolina Balazs, PhD

Office of Environmental Health Hazard Assessment

Rural Water Issues: Progress and Challenges in Implementing California's Human Right to Water

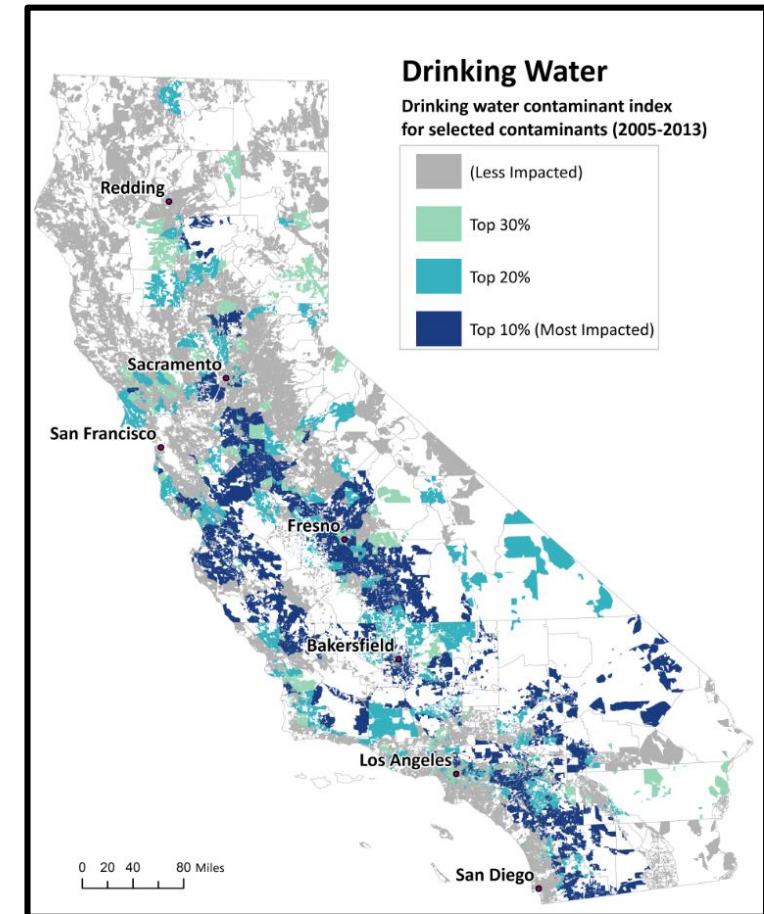
US EPA Webinar

October 8, 2019

Safety, accessibility and affordability of drinking water create challenges across California

- Small water systems impacted by contaminants like nitrate and arsenic
- Disproportionate impacts in small, low-income communities and communities of color
- Systems with aging infrastructure, unreliable supplies, and unaffordable water rates

Most impacted areas in California



Source: CalEnviroScreen, OEHHA



California's Human Right to Water Law Enacted to Address These Challenges

- State Water Resources Control Board enlisted the expertise of OEHHA to:
 - develop a framework and analytical methodology for assessing the degree to which the state's water systems are providing safe, accessible and affordable drinking water
- OEHHA's mission:
 - protect human health and the environment through scientific evaluation of risks posed by hazardous substances
- Developing baseline trends, and tracking outcomes and results is an essential part of monitoring human right to water goals



Photo Credit: Community Water Center



How to identify baseline trends?

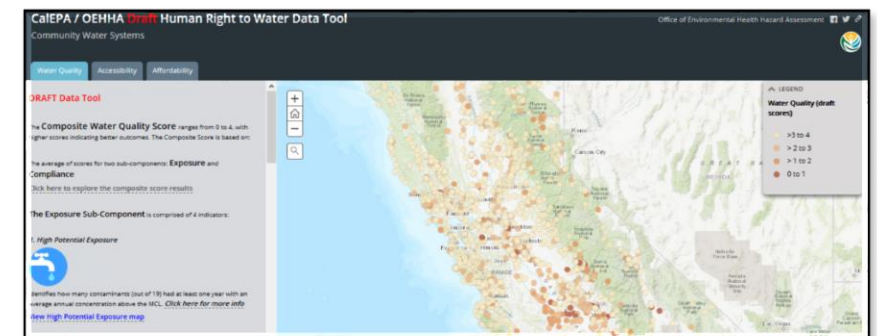
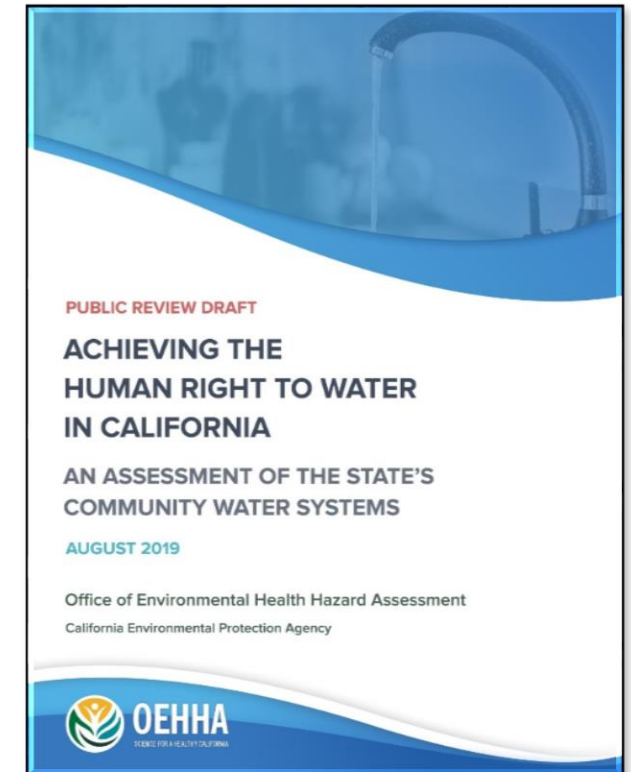
OEHHA's Assessment Report and Data Tool

1. Draft Assessment Report:

- Assessment of community water systems across three components:
 - water quality, accessibility, and affordability
- System-level results highlight key baseline trends and allow for assessment over time

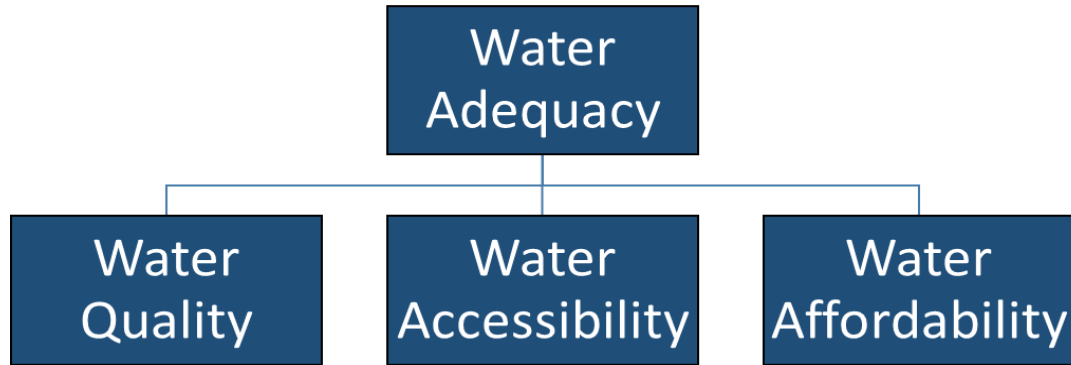
2. Interactive Draft Web Data Tool:

- Public and governmental uses

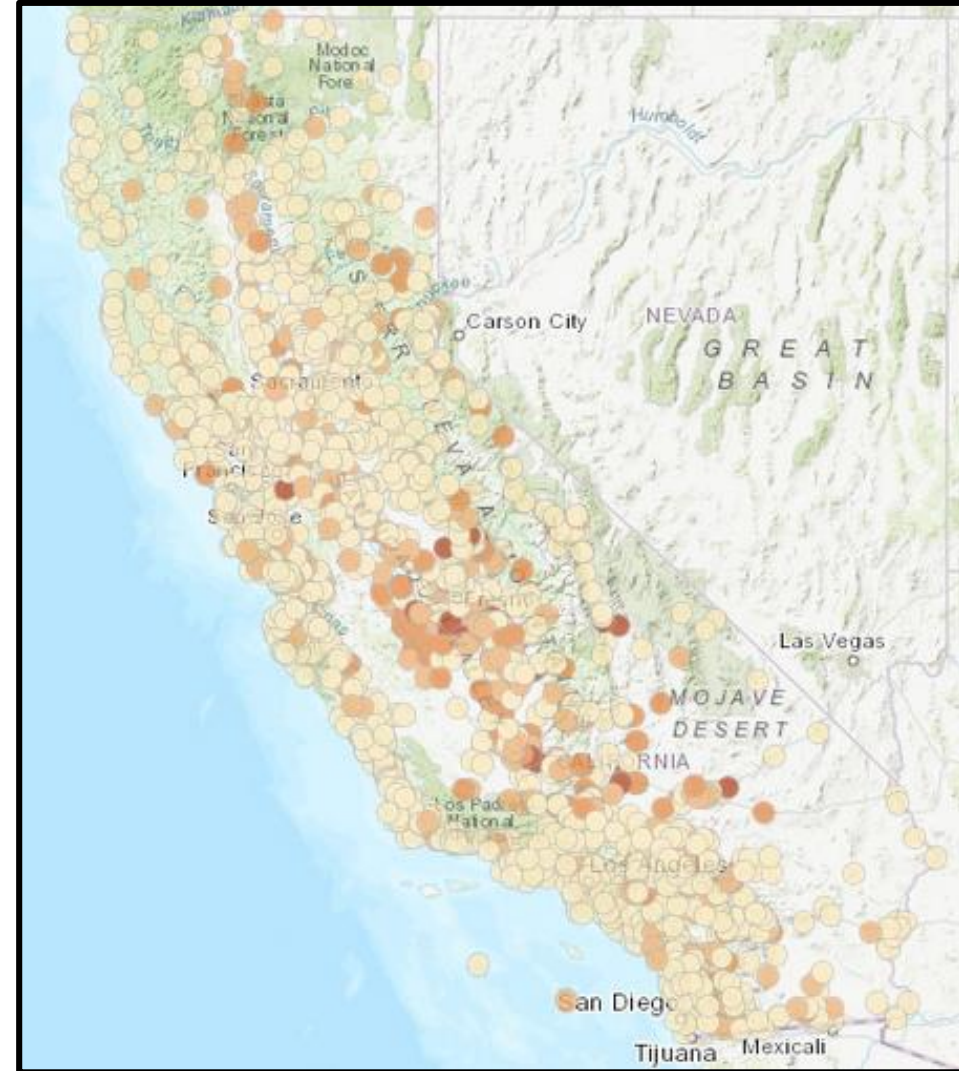




Framework Overview



- ***13 indicators***
- ***Unit of analysis:***
Community Water System
- ***Time period:*** 2008-2016
- ***Statewide application***

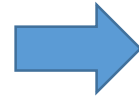


Example of draft web tool results



Water Quality: Four **exposure** indicators

**Annual average
contaminant
concentration in
delivered water**



Potential high exposure

How many contaminants' annual average concentration exceeded the MCL?



Presence of acute contaminants

Are the above contaminants associated with health effects from short term exposure?
(nitrate, perchlorate, fecal/E. coli)



Maximum duration of potential high exposure

How long did potential high exposure last?



Data availability

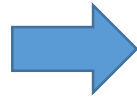
Was water quality data available?




(data source: Water Quality Monitoring database)



Water Quality: Three **compliance** indicators

Count of MCL Violations



	Non-compliance with primary drinking standards How many contaminants received at least one MCL violation in study period?
	Presence of acute contaminants Are the above contaminants associated with health effects from short term exposure? (nitrate, perchlorate, fecal/E. coli)
	Maximum duration of non-compliance How long did non-compliance last?

(data source: SDWIS database)



Water Accessibility: Three indicators

Physical Vulnerability



Physical vulnerability to water outages

What is the source type and how many sources?

Institutional Vulnerability



Institutional constraints

What is the size and disadvantaged community (DAC) status?



Managerial constraints

How many monitoring and reporting violations?

Data sources: SDWIS and U.S. census data

Future steps: Additional indicators to address other aspects of accessibility








Water Affordability: Three indicators

Affordability Ratio =

$$\frac{\text{Monthly Water Bill @ 6 Hundred Cubic Feet}}{\text{Income of Water System}} \geq \text{Multiple ratios}$$

Data sources: electronic Annual Report, census data, poverty threshold calculations from Public Policy Institute of California

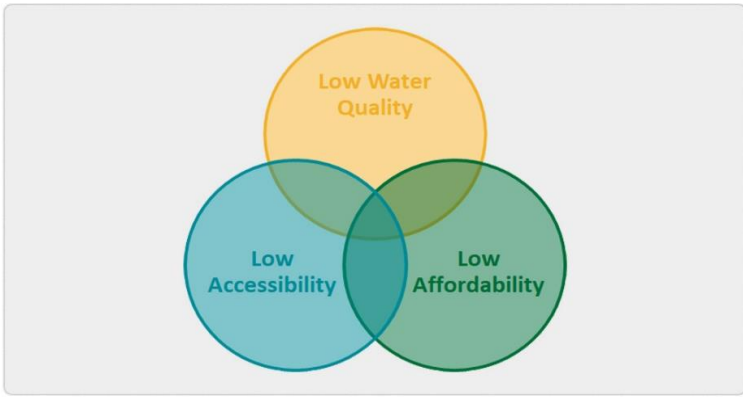
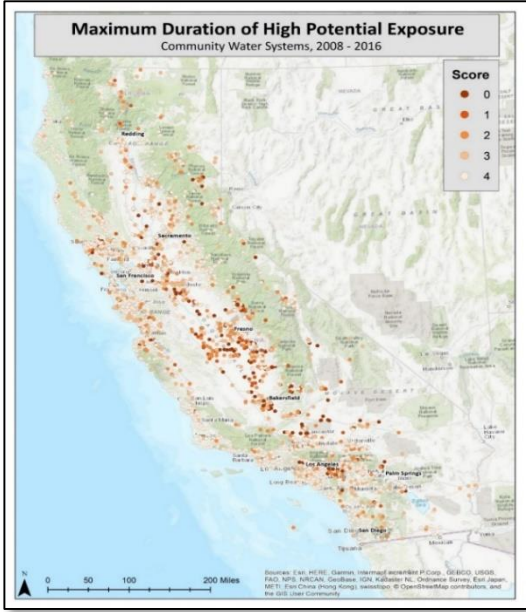
	Affordability ratio at the <u>median household income</u> level
	Affordability ratio at the <u>county poverty threshold</u> level
	Affordability ratio at the <u>deep poverty threshold</u> level

+ Proportion Households Earning at the Income Threshold

Gaps: 60% of systems missing data (but 90% of population covered). Additional effort needed to fill in water cost data gaps

Uses of the Report and Data Tool

- Report helps answer questions such as:
 - How long did elevated drinking water contaminant concentrations last?
 - Which water systems face physical vulnerability challenges?
- How can we look at a system across multiple components?

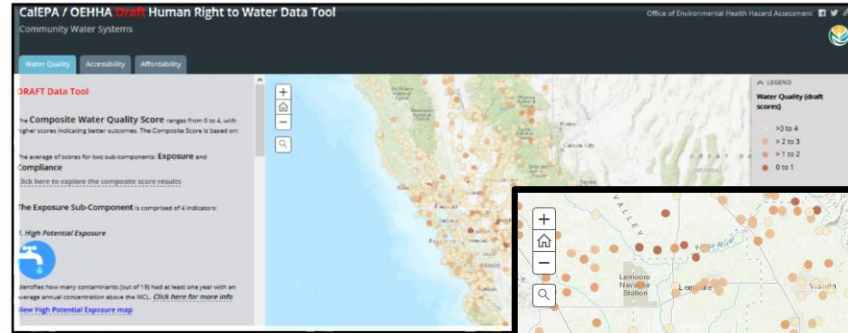


Indicator	Water Quality							Accessibility			Affordability		
	1	2	3	4	5	6	7	1	2	3	1	2	3
System A	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue
System B	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue
System C	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue



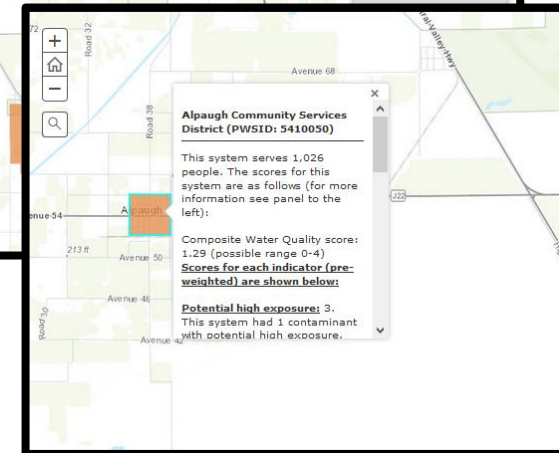
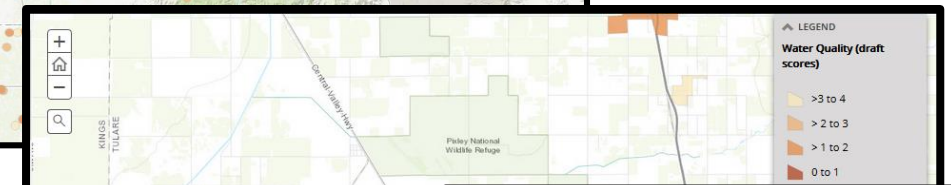
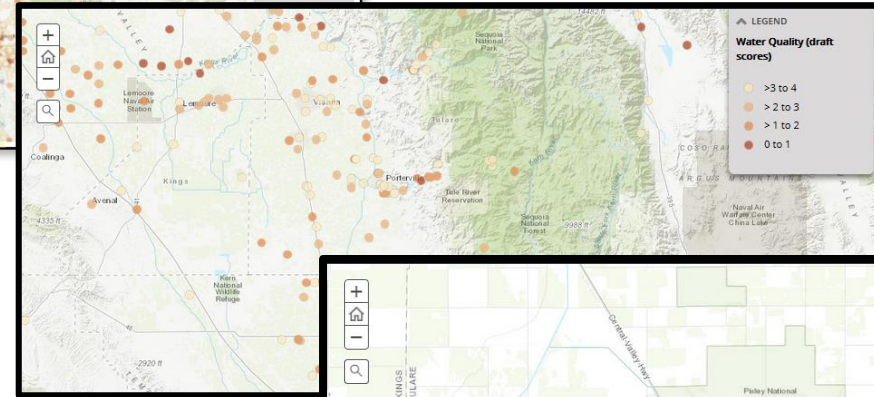


Web platform allows users to explore results

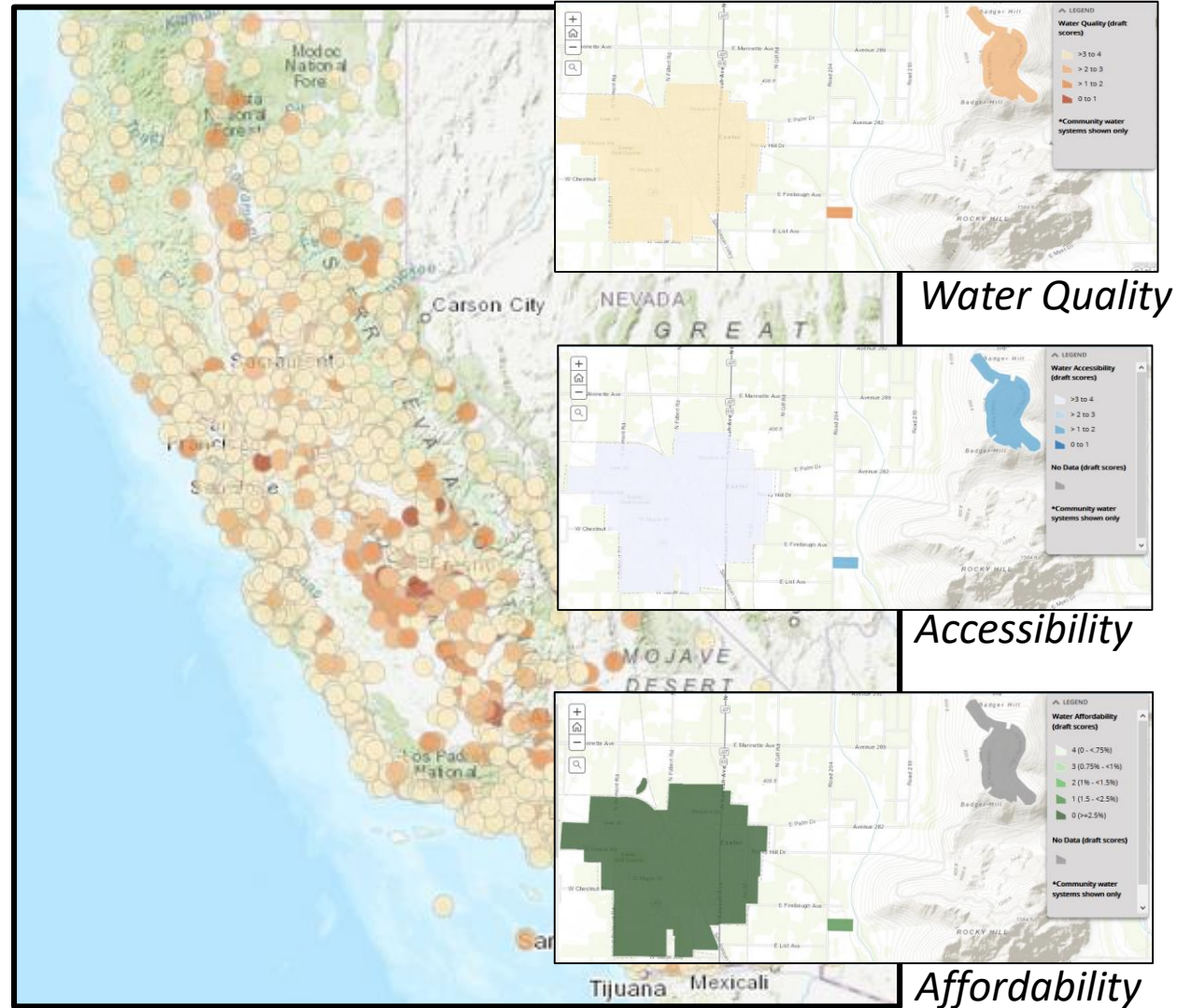


- Draft Web Version:
 - Indicator & Component Scores
 - Statewide perspective
 - Individual water system results
 - Links to Water Board's compliance information

- Uses:
 - Public use
 - Governmental uses (e.g. Water Board)



Web platform: comparing across components



Next Steps

- **Public comment period:**
 - Comment period, ending November 8, 2019
 - <https://oehha.ca.gov/water/report/human-right-water-california>
- **Public workshops on Report & Platform:**
 - Webinar, October 3
 - Academic Workshop, October 11
 - Technical Workshop, October 17
 - Fresno Community Workshop, October 23
- **Future Versions of Data Tool:**
 - Data gathering and analytic efforts
 - Expand and enhance the data tool through an iterative process
 - Release future versions that include addition topics (e.g., domestic wells, sanitation)



Conclusion

- OEHHA's Draft Human Right to Water Report and Tool is an important part of state efforts to evaluate drinking water challenges and create solutions
- Tracking progress and outcomes is an essential part of assessing the human right to water
- Results allow state and local government, researchers, and communities to track water system progress over time.



Thanks!

- Contact: Carolina.Balazs@oehha.ca.gov or hr2w@oehha.ca.gov
- <https://oehha.ca.gov/water/report/human-right-water-california>

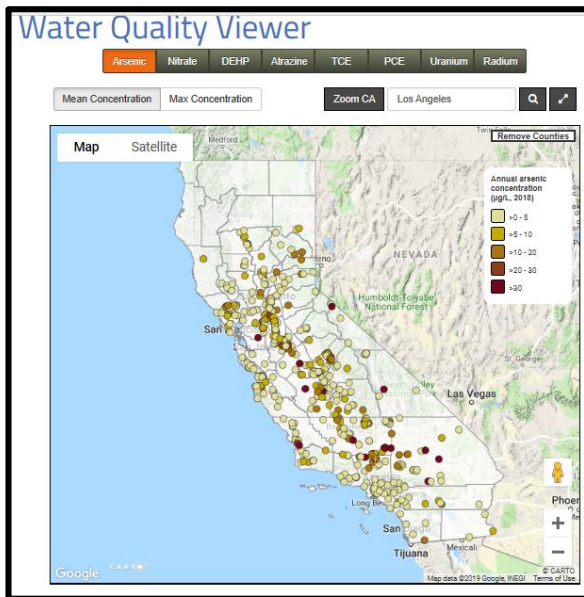
Discussion

- **Summary**
- **Questions and Answers**
- **For more information, tools and resources, go to EPA Environmental Justice Learning Center**

<https://www.epa.gov/environmentaljustice/state-and-local-government>

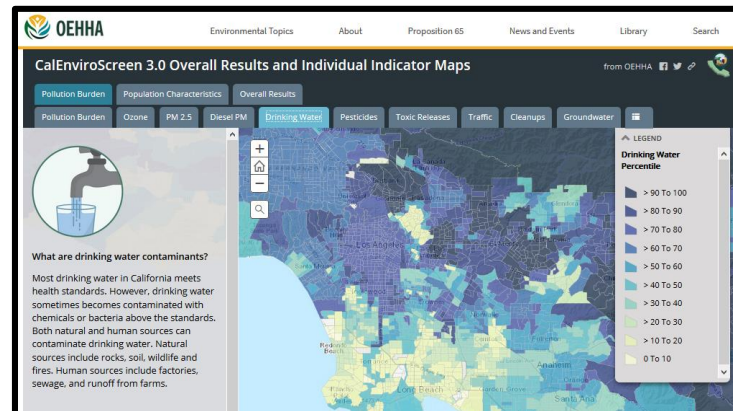


Additional Informational Resources on California's Drinking Water



Tracking California:
contaminant-specific results

<https://www.trackingcalifornia.org/water-quality/water-quality-viewer>



OEHHA:
Cumulative impacts
CalEnviroScreen, Drinking Water Indicator
<https://oehha.ca.gov/calenviroscreen/maps-data>

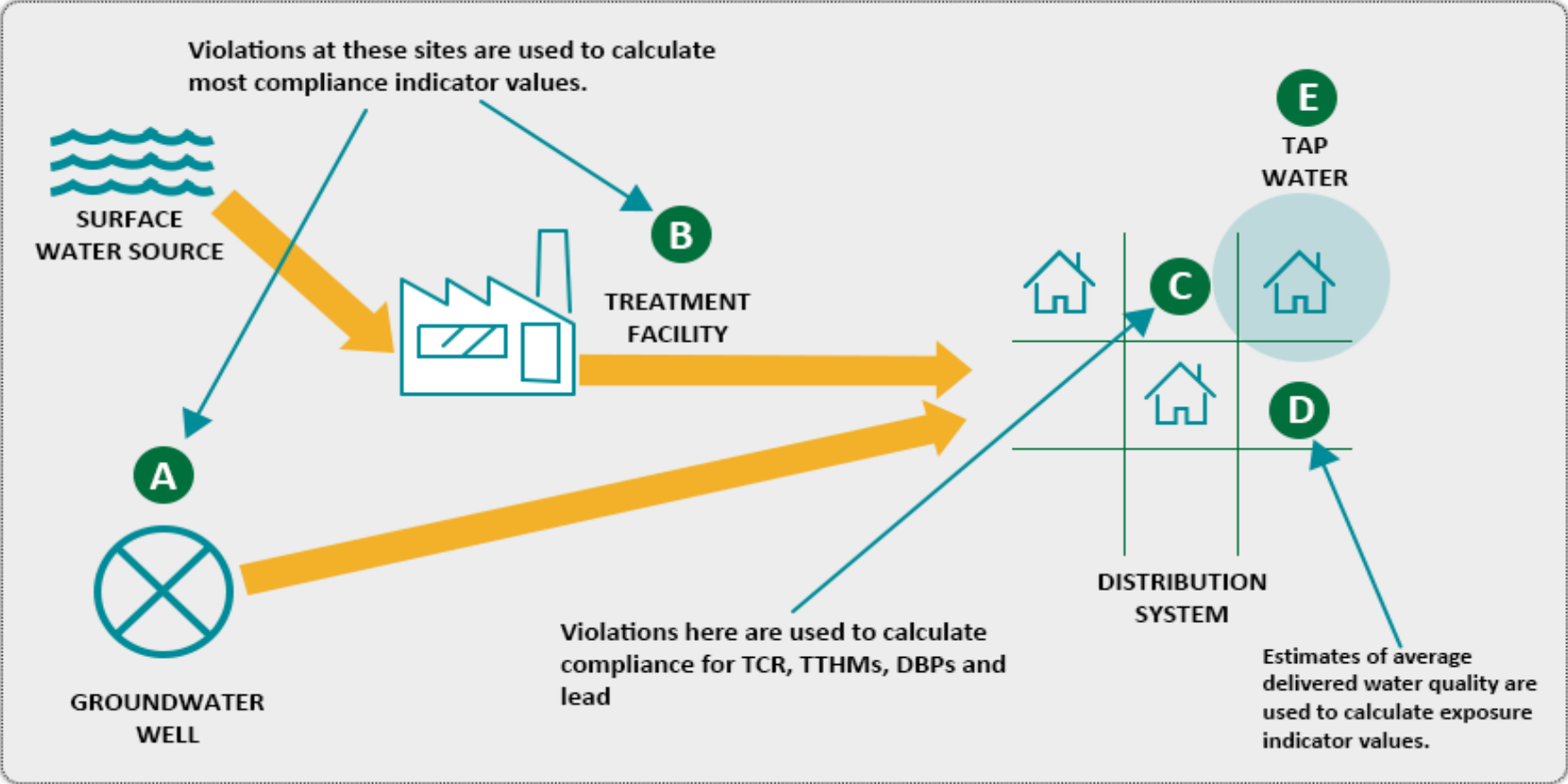


UC Davis
Identifying Disadvantaged Unincorporated Communities
<https://regionalchange.ucdavis.edu/publication/water-justice>



State Water Board:
Compliance
Human Right to Water Portal
https://www.waterboards.ca.gov/water_issues/programs/hr2w/

Exposure vs Compliance



State EJ Training Webinar
Rural Water Issues: Progress and Challenges in Implementing
California's Human Right to Water
Learning Objectives

Participants will get an overview of:

1. policies, tools and resources associated with implementation of California's Human Right to Water Framework;
2. how community engagement and stakeholder advocacy have helped shaped California's water laws and policies;
3. how these programs and tools are applied to rural water issues;
4. how California is tracking progress towards achieving clean, accessible and affordable drinking water;
5. remaining and emerging challenges, including a changing climate; and
6. policies and methodologies than can be applied elsewhere.

**State EJ Webinar on
Rural Water Issues: Progress and Challenges in Implementing
California's Human Right to Water
Speakers Biographies**

Susana De Anda

Susana De Anda is Co-Founder and Executive Director of the Community Water Center, a nonprofit environmental justice organization based in California's San Joaquin Valley, whose mission is to act as a catalyst for community-driven water solutions through organizing, education, and advocacy. Susana is a seasoned community organizer and has received numerous awards and recognitions, including: James Irvine Foundation Leadership Award (2018); White House Champion of Change for Climate Equity (2016); Mark Dubois Award from Friends of the River (2014); "150 Fearless Women in the World" by Newsweek Magazine (2012); "Women on Top – Top Activist" by Marie Claire magazine (2012); AOL sponsored PBS three-part series titled, *Makers: Women Who Have Shaped America* (2012); and "Las Fabulosas" and "Inspiring Latinas" by *Powerful Latinas* (2011); and the 2009 Petra Foundation Fellowship award. In addition, Jill Iscol's book, *Hearts on Fire*, features a chapter on Susana De Anda and CWC (2011). Susana's experience includes planning and organizing positions at the Center on Race, Poverty and the Environment; the County of Merced Planning Department; the Santa Barbara County Water Agency; and the Santa Barbara non-profit Community Environmental Council. Susana earned a B.A. from the University of California, Santa Barbara with a double major in Environmental Studies and Geography.

E. Joaquin Esquivel

E. Joaquin Esquivel was appointed to the State Water Resources Control Board by Governor Jerry Brown in March 2017 and designated by Governor Gavin Newsom as Chair in February 2019. Previously, he served as Assistant Secretary for federal water policy at the California Natural Resources Agency in the Governor's Washington, D.C. office, where he facilitated the development of policy priorities between the agency, the Governor's Office, the California Congressional delegation, and federal stakeholder agencies. For more than eight years prior to that he worked for U.S. Senator Barbara Boxer of California, most recently as her legislative assistant covering the agriculture, Native American, water, oceans, and nutrition portfolios, in addition to being the director of information and technology. He was born and raised in California's Coachella Valley. He holds a BA from the University of California, Santa Barbara in English.

Carolina Balaz

Carolina Balaz is a Research Scientist for the California Environmental Protection Agency's (EPA) Office of Environmental Health Hazard Assessment (OEHHA), where she leads OEHHA's Human Right to Water work. Dr. Balaz is also the co-founder and co-lead of the Water Equity Science Shop at the University of California, Berkeley, a cross-institutional collaboration promoting community-based water equity research. Her studies on social disparities in drinking water contamination in California—published in leading public health journals—were among the first such studies in California. Prior to joining OEHHA, she was a post-doctoral scholar at UC Davis and worked as a Research Scientist with the Community Water Center. She is the recipient of the Switzer Environmental Leadership Fellowship, the UC Chancellor's Award for Diversity and Community, the National Science Foundation Graduate Research Fellowship and a Fulbright Fellowship. She holds a PhD and Masters from UC Berkeley in Energy and Resources, and a BS magna cum laude in Environmental Science from Brown University.

Charles Lee (Moderator)

Charles Lee is widely recognized as a true pioneer in the arena of environmental justice. He was the principal author of the landmark report, *Toxic Wastes and Race in the United States*. He helped to spearhead the emergence of a national environmental justice movement and federal action including the First National People of Color Environmental Leadership Summit, Executive Order 12898, EPA's Office of Environmental Justice, National Environmental Justice Advisory Council (NEJAC), and the Federal Interagency Working Group on Environmental Justice. Lee is currently the Senior Policy Advisor for Environmental Justice at the U.S. Environmental Protection Agency (EPA). He led the development and implementation of EPA's agency-wide environmental justice strategic plans, e.g., Plan EJ 2014 and EJ 2020. He has served in multiple capacities, ranging from creating the United Church of Christ's environmental justice program to directing EPA's environmental justice office. In these capacities, he led efforts to incorporate environmental justice into EPA's rulemaking process, develop models for collaborative problem-solving, transform brownfields redevelopment into a community revitalization paradigm, advance approaches to address cumulative risks and impacts, and lay a strong science foundation for integrating environmental justice into decision-making. Lee has authored numerous papers and articles on environmental justice over the past three decades and received numerous awards.

Rural Water Issues: Progress and Challenges in Implementing California's Human Right to Water Resources

Key Websites

Community Water Center

<https://www.communitywatercenter.org/>

California (CA) Water Board Human Right to Water Portal

[Human Right to Water Portal](#)

CalEPA Office of Environmental Health Hazard Assessment (OEHHA) Human Right to Water

<https://oehha.ca.gov/water/report/human-right-water-california>

Key Legislation and Policies

[Human Right to Water Act](#) (AB 685) - 2012

[Sustainable Groundwater Management Act](#) (AB 1739, SB 1168, SB 1319) - 2014

[Low-Income Rate Assistance Act](#) (AB 401) - 2015

CA Water Board adopts [Resolution No. 2016-0010](#), "Adopting the Human Right to Water as a Core Value and Directing its Implementation in Water Board Programs and Activities" - 2016

[Water Shutoff Protection Act](#) (SB 998) - 2018

[Drinking Water Needs Assessment](#): provides funding for the State Water Board - 2019

[Safe and Affordable Drinking Water Fund](#) (SB 200) - 2019

CalEPA OEHHA releases [Human Right to Water tool](#) – 2019

CA Water Board releases draft [Low-Income Rate Assistance Program Report](#) - 2019

Drinking Water Information and Analysis Tools

CA Water Board, State of California Drinking Water [2017 Annual Compliance Report](#) (2018)

CA Water Boards, [Exceedance/Compliance Status of Public Water Systems](#) Interactive Map

University of California at Davis Center for Regional Change, "[The Struggle for Water Justice in California's San Joaquin Valley: A Focus on Disadvantages Unincorporated Communities](#)" (2018)

CalEPA Office of Environmental Health Hazard Assessment, [Draft Human Right to Water Data Tool](#)

CalEPA Office of Environmental Health Hazard Assessment, [A Framework and Tool for Evaluating California's Progress in Achieving the Human Right to Water](#) (January 2019)

CalEPA Office of Environmental Health Hazard Assessment, [Achieving the Human Right to Water: An Assessment of the State's Community Water Systems](#) (August 2019)

Other Resources (Videos, Articles and Success Stories)

Unitarian Universalist Justice Ministry of California, [Thirsty for Justice: The Struggle for the Human Right to Water](#) documentary

CA Department of Water Resources, East Porterville [success story video](#) (2018)

CA Water Board, [Water Partnership Success Stories](#)

University of California at Berkeley Law School, [The Human Right to Water in California: A Framework for Implementation for State Agencies](#) (2013)

Francis, Rose and Laurel Firestone, "[Implementing the Human Right to Water In California's Central Valley: Building a Democratic Voice through Community Engagement in Water Policy Decision Making](#)" *Willamette Law Review* (2011)