



**California**

**DRIP Collaborative**

# **2025 Workgroup: Water Infrastructure and Planning**

**Drought Resilience Interagency & Partners (DRIP) Collaborative**

**Wednesday, June 18, 2025**

**3:00-4:30PM PT**

**Remote Participation (via Zoom)**

**Facilitated by Workgroup Point of Contact: Anthony Navasero ([Anthony.Navasero@water.ca.gov](mailto:Anthony.Navasero@water.ca.gov))**

**California Department of Water Resources - Drought Coordinator, Executive Division**

# Meeting Information

1. This meeting is being recorded.
2. This meeting must adhere to the Bagley Keene Open Meeting Act rules. The workgroup quorum is required (5 out of the 9 on the workgroup). If we don't meet quorum, we will offer this time and this space for an informal discussion about water infrastructure and planning related to drought resilience.
3. DRIP Collaborative workgroup members must keep their cameras on during the meeting. You must notify the group if you turn off your camera and state why.
4. Members of the public and other DRIP Collaborative members are welcome to listen. A public comment session is included later in the meeting.
5. Please practice electronics courtesy and mute when not speaking.

# Meeting Purpose and Agenda

**Objectives:** Continue vetting and developing recommendation ideas proposed at the May 16th, 2025 DRIP Collaborative meeting related to water infrastructure and understanding drought and water shortage impacts to vulnerable communities. Discuss other recommendation ideas raised during the meeting to decide how to undertake, potentially reconstruct, and develop them into draft recommendations.

## Meeting Agenda

- |        |   |
|--------|---|
| 3:00pm | Welcome, Roll Call  |
| 3:05pm | Refresher & Proposed Pathways   |
| 3:15pm | Existing work underway on vulnerable communities (e.g., SAFER Needs Assessment)                 |
| 3:35pm | Discuss and Refine Scope of Three Primary Ideas for Recommendation                              |
| 4:05pm | Discuss and Refine Scope of Other Preliminary Ideas for Recommendations and How to Address Them |
| 4:25pm | Public Comment  |
| 4:30pm | Adjourn   |

## Roll Call

# WORKGROUP PARTICIPANTS

(Quorum = 5 DRIP members)

1. **Emily Rooney**, Agricultural Council of California
2. **Jason Colombini**, Jay Colombini Ranch, Inc.
3. **Tim Worley**, California Association of Mutual Water Companies
4. **Kyle Jones**, Community Water Center
5. **Alvar Escriva-Bou**, University of California Davis
6. **Laura Ramos**, California Water Institute at Fresno State
7. **Suzanne Pecci**, Public Member
8. **Katie Ruby**, California Urban Water Agencies
9. **Carolina Hernandez**, Los Angeles County Public Works

# REFRESHER & PROPOSED PATHWAYS

(5 MINUTES)

# Refresher & Pathways

Three preliminary ideas to pursue with leads:

- 1. Identifying planning gaps and solutions for vulnerable communities** from existing programs such as the Water Board's California drinking water needs assessment (SAFER program) and tools such as the Department's Water Shortage Vulnerability tool (Kyle Jones / Carolina Hernandez)
- 2. Improve systems and regulatory flexibility** to improve infrastructure response to "weather whiplash" and extremes through, as an example, the increased use of existing water infrastructure for more uses. Additionally provide regulatory flexibility to implement smaller water infrastructure projects that are less challenging and would provide greater system flexibility (Laura Ramos / Katie Ruby)
- 3. Ground water recharge and Nature Based Solutions be included as new water sources** by considering more green or natural infrastructure while focusing on the need to provide water infrastructure (e.g., conveyance, distribution, and recharge facilities) for groundwater recharge (Kyle Jones / Emily Rooney)



# Pathways: Level of Engagement

- **Inform:** Learn about and raise awareness of existing efforts.
- **Compliment:** Enhance coordination by contributing to ongoing efforts and addressing specific gaps where DRIP can add value.
- **Lead:** Take initiative (coordinate new efforts, drive solutions, etc.) on issues lacking adequate attention.

**INFORM EXAMPLE:** Promote an agency drought outreach campaign.

**COMPLIMENT EXAMPLE:** Review campaign and provide feedback to strengthen messaging and expand reach.

**LEAD EXAMPLE:** Develop a statewide drought outreach initiative tailored to underserved regions.

## Consider:

How could the recommendation ideas change if DRIP were to Inform, Compliment, or Lead?



# Proposed Pathways

## Ideas Drafted:

1. **Support regional/local water infrastructure long-term planning** as well as statewide infrastructure planning
2. **Improve special districts and planning districts coordination** to improve interaction of related planning efforts
3. **Develop green infrastructure investment plan** intended for more fish and flows while identifying opportunities to remove non-beneficial water supply infrastructure (Redgie Collins)

## Proposed Pathways:

**Combine** into one recommendation

**Learn** from subject matter expert and **advance** development





Discussion Questions:

- How can the SAFER and Needs Assessment data inform the development of DRIP Collaborative ideas for recommendations?
- What are the opportunities to address gaps, advance, and strengthen current related efforts?

Andrew Altevogt, California State Water Resources Control Board

# EXISTING UNDERSTANDING AND DATA ON DROUGHT AND WATER SHORTAGE IMPACTED VULNERABLE COMMUNITIES

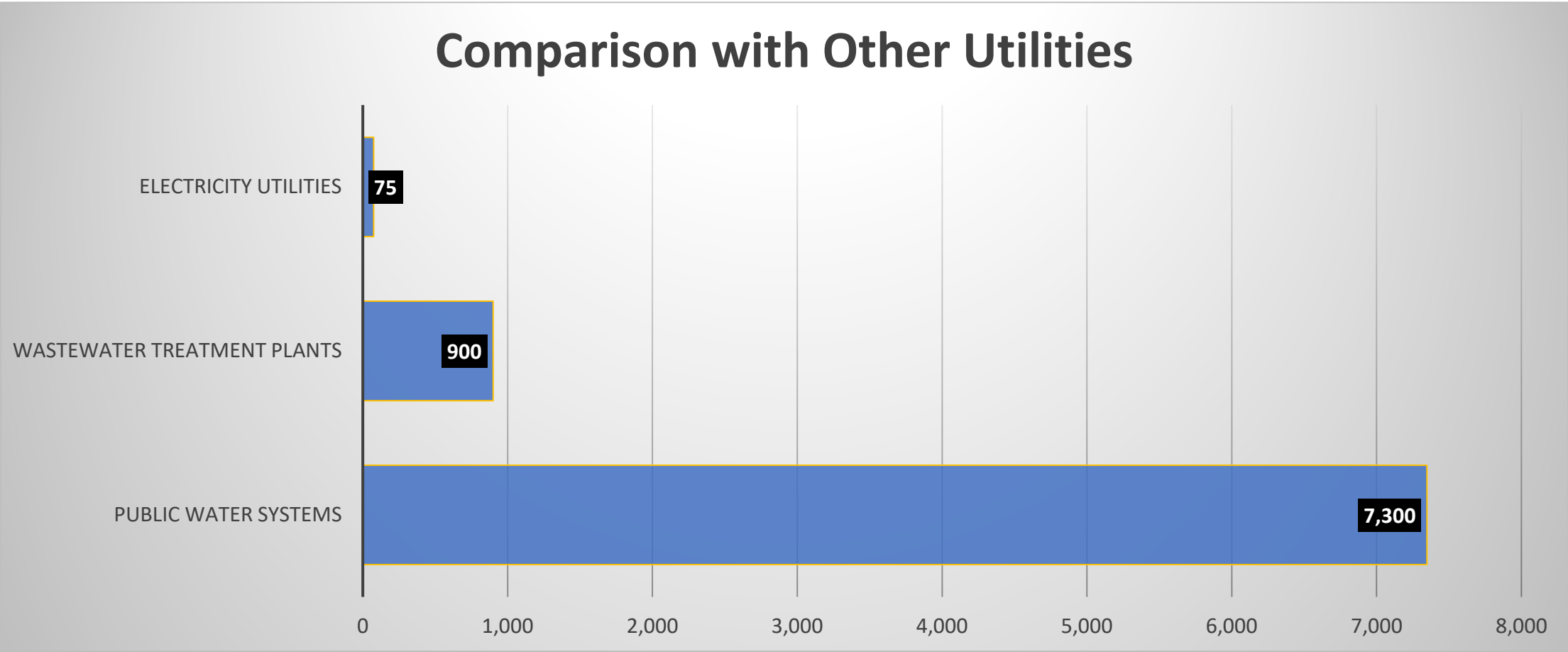
(20 MINUTES)



# State Water Board: Division of Drinking Water

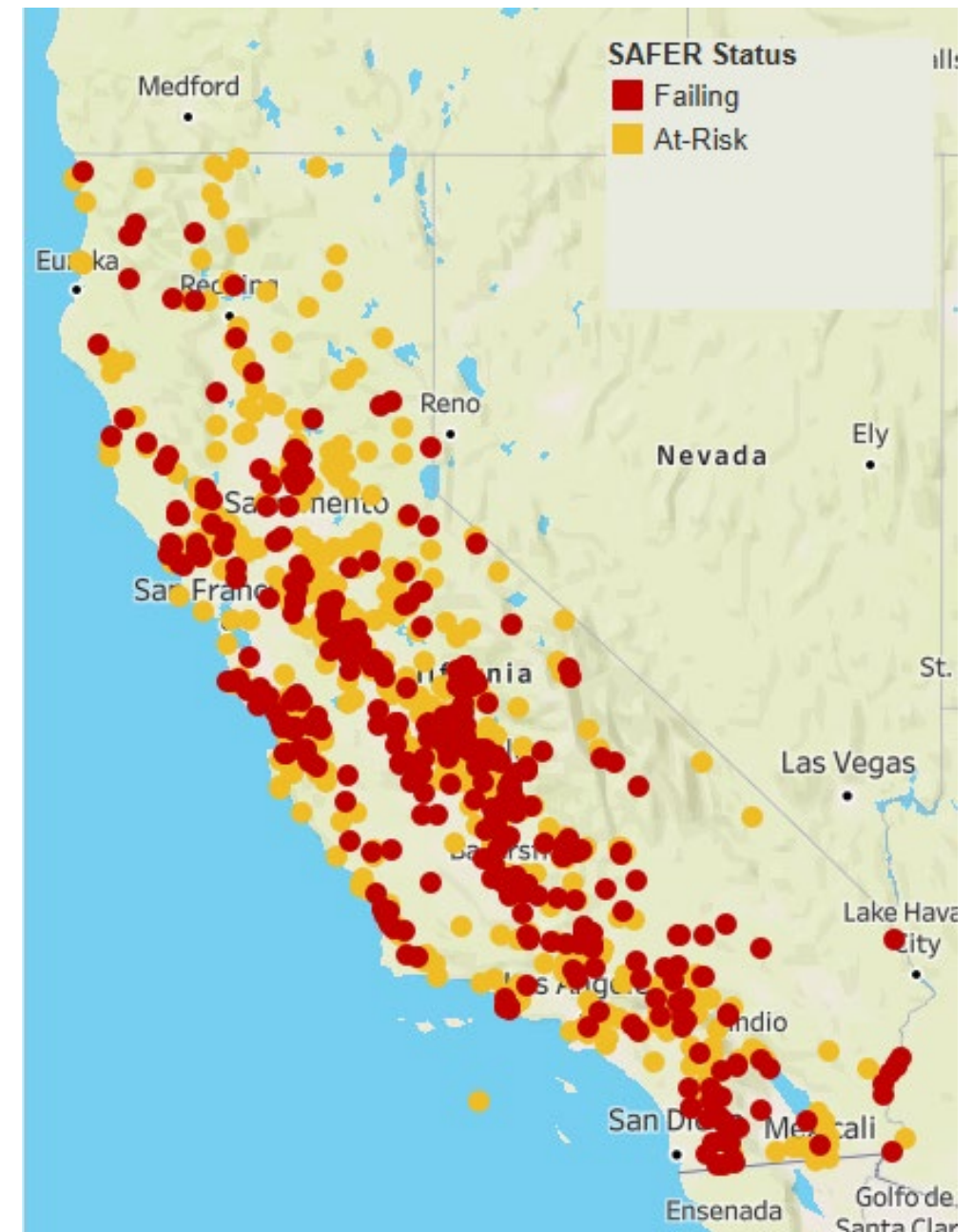


# CA's Drinking Water Problem: Fragmented Infrastructure

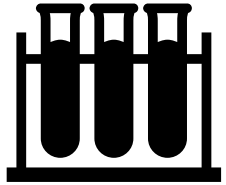


# Public Water Systems

- **Over 95% of Californians are served by** water systems that provide reliable **safe drinking water**.
- **7000+ total water systems** (15% Investor Owned Utility and 85% Public Water System)
- **3,000+ Community Water Systems (CMS, 15+ connections)**
  - Nearly 2,300 are small, serving fewer than 3,300 connections each.
  - Approximately 365 are failing to meet safe drinking water standards.
- **90% of drinking water violations** occur in water systems serving **500 connections or less**.



# Drinking Water Challenges



Water quality



Technical  
capacity



Water supply



Managerial



Financial



Governance



# Preventing Unsustainable Drinking Water Systems





# SAFER DRINKING WATER

SAFE AND AFFORDABLE FUNDING FOR EQUITY AND RESILIENCE

## SAFER program components:

Drinking water  
needs  
assessment



Water  
system  
support



Outreach and  
engagement



Funding  
sources



Regulatory  
authorities



SAFER  
Advisory  
Group



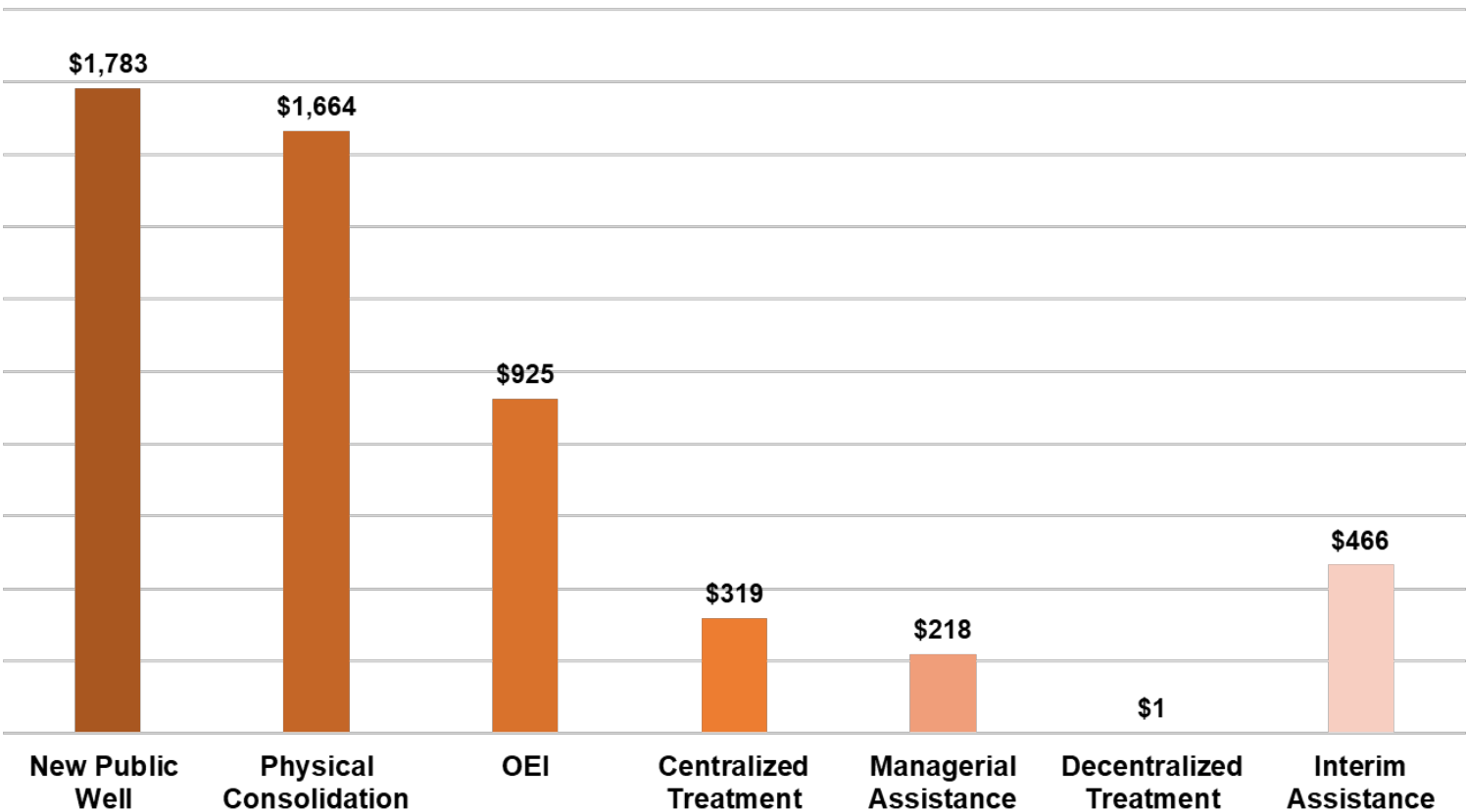
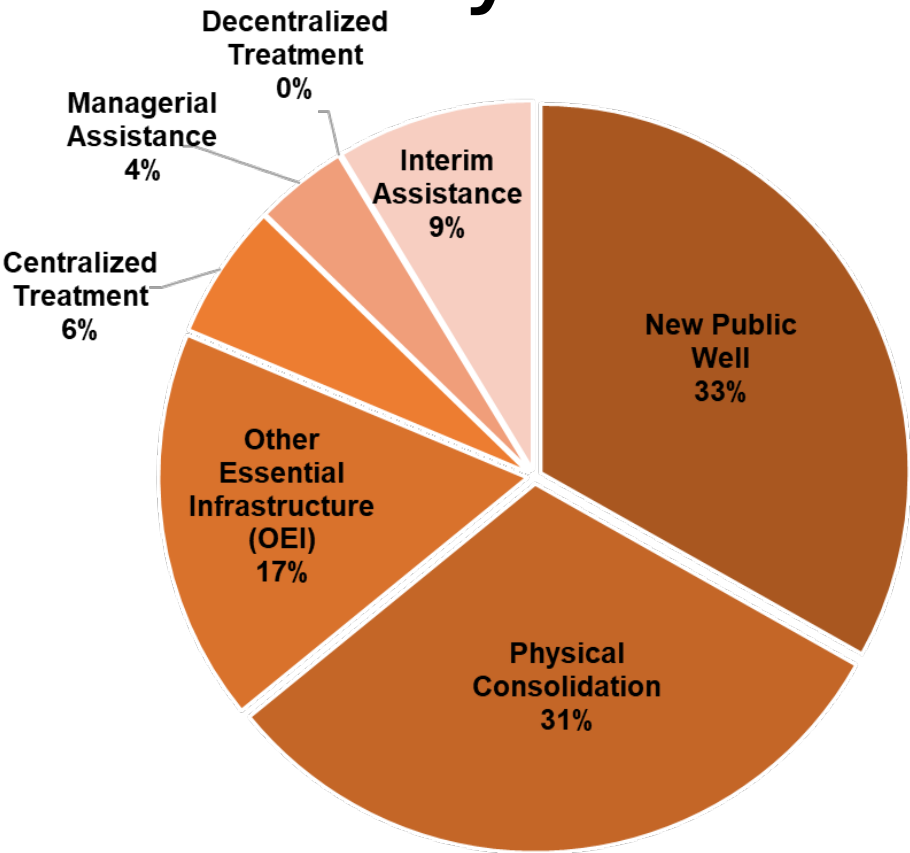
# SAFER Needs Assessment



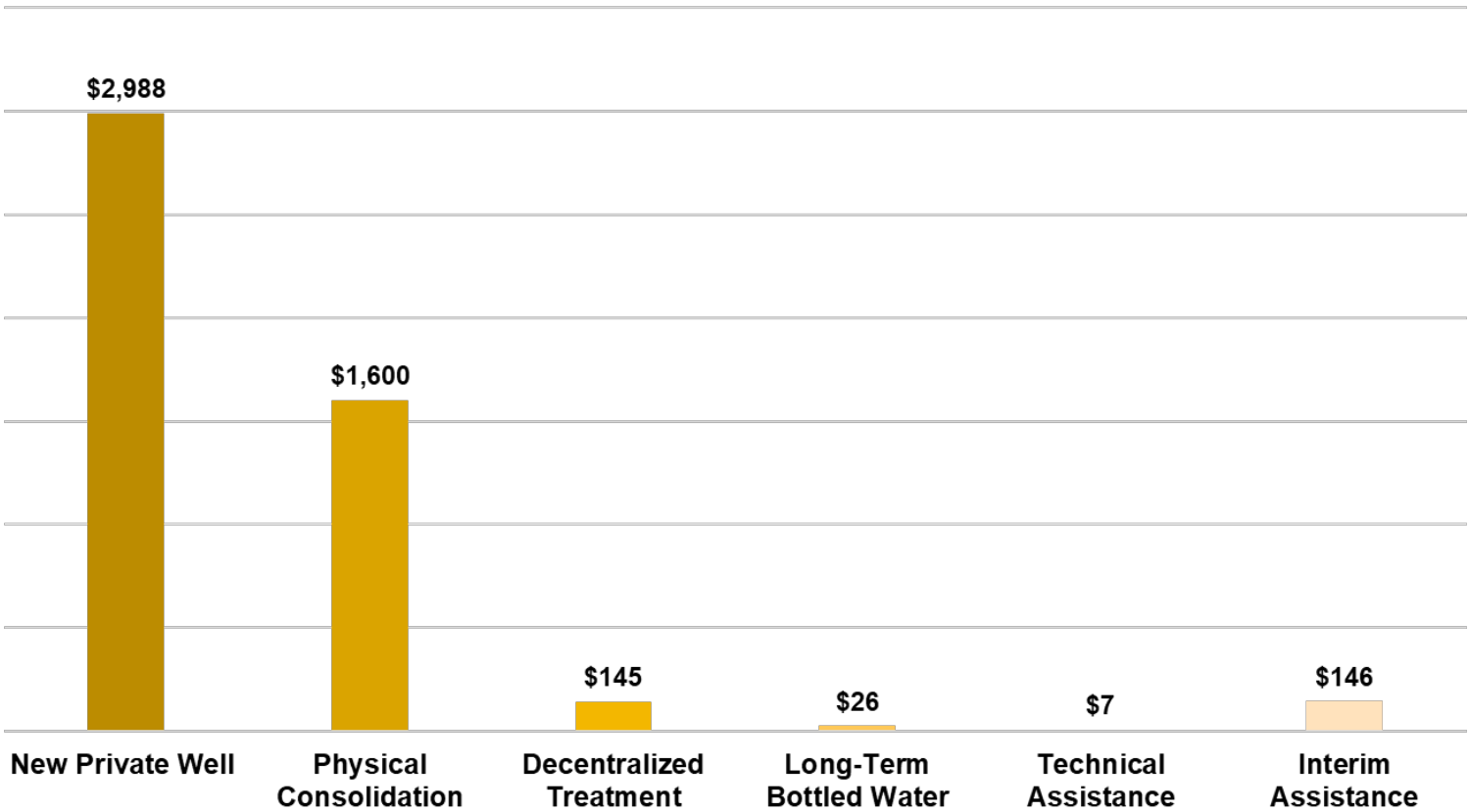
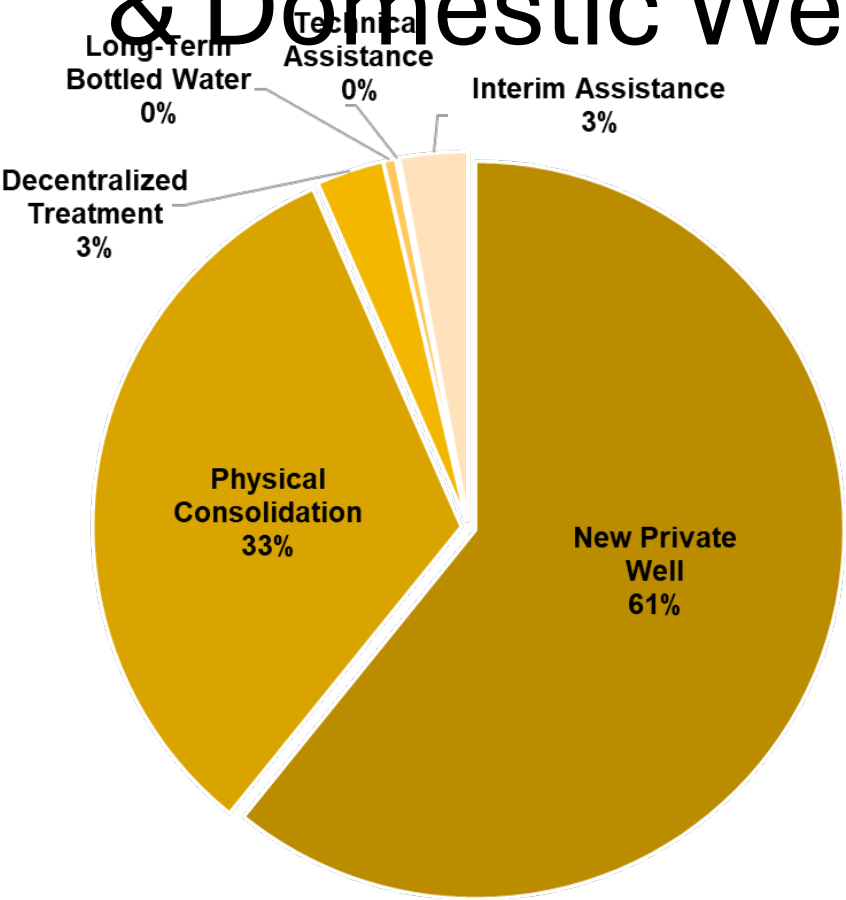
<https://bit.ly/SAFER-NA>



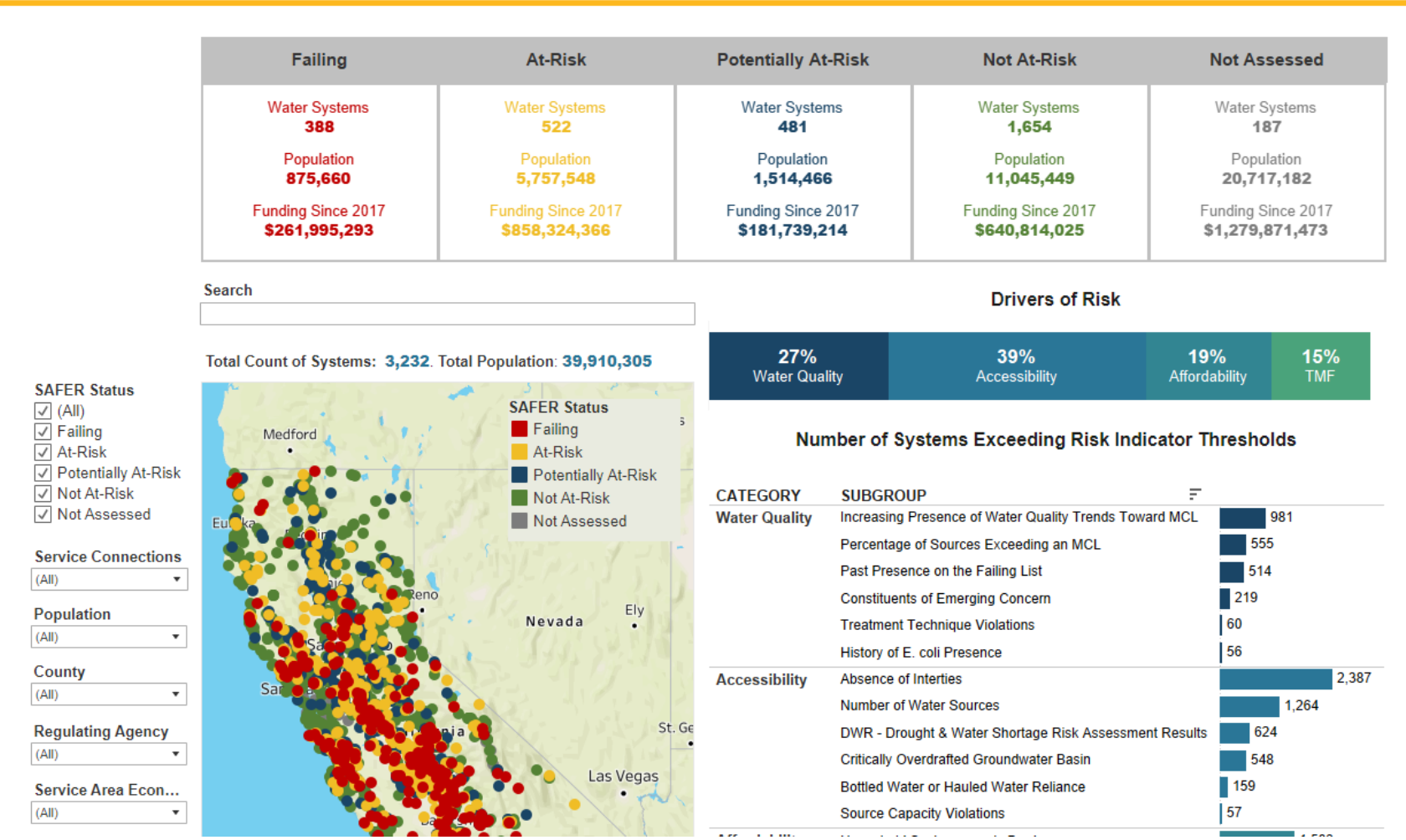
# 2024 Cost Assessment Results: Failing & At-Risk Systems



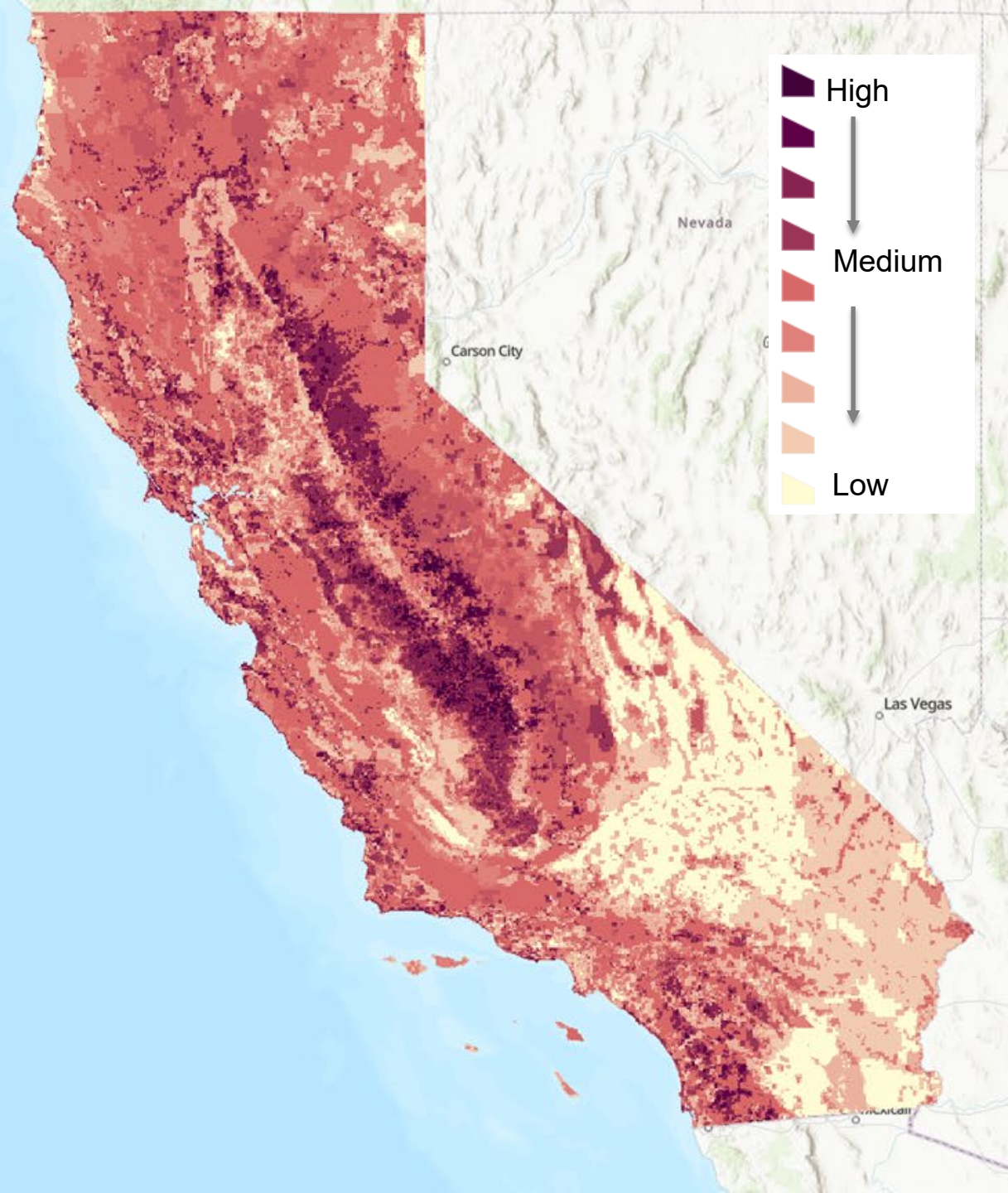
# 2024 Cost Assessment Results: State Smalls & Domestic Wells



# SAFER Dashboard



# DWR WATER SHORTAGE VULNERABILITY TOOL



# Legislative Mandate – SB 552

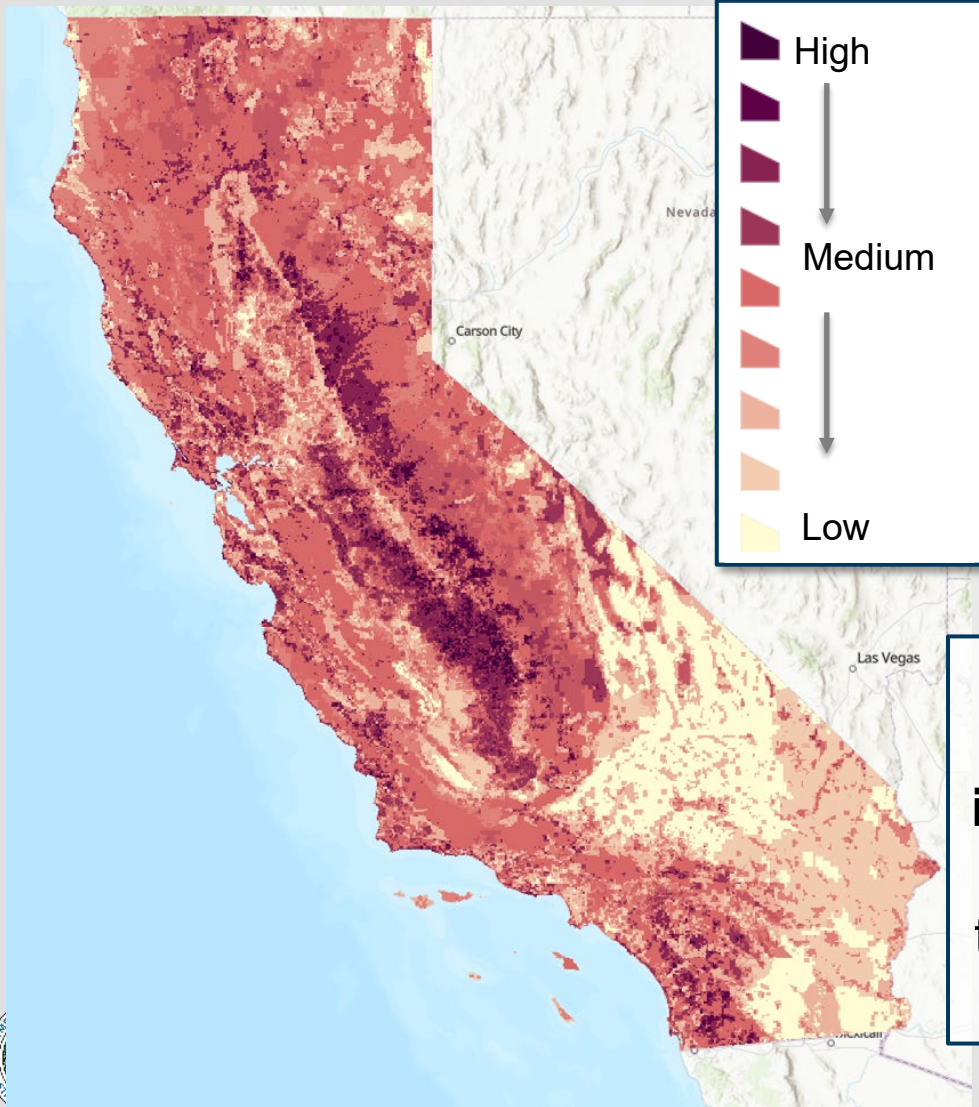
## CHAPTER 4. State Agency Implementation (10609.80)

1. **Maintain**, in partnership with the state board and other relevant state agencies, **the risk vulnerability tool** developed as part of the County Drought Advisory Group process and continue to refine existing data and gather new data for the tool, including, but not limited to, data on all of the following:
  - a. **Small water suppliers** and **nontransient noncommunity water systems serving a school**.
  - b. **State small water systems** and rural communities.
  - c. **Domestic wells** and other self-supplied residents.
2. **Update the risk vulnerability tool** for small water suppliers and rural communities periodically, by doing all of the following:
  - a. **Revise the indicators** and construction of the scoring as more data becomes readily available.
  - b. Make existing and new **data publicly available** on the California Open Data internet web portal.
  - c. In consultation with other relevant state agencies, **identify deficits in data quality and availability** and develop recommendations to address these gaps.

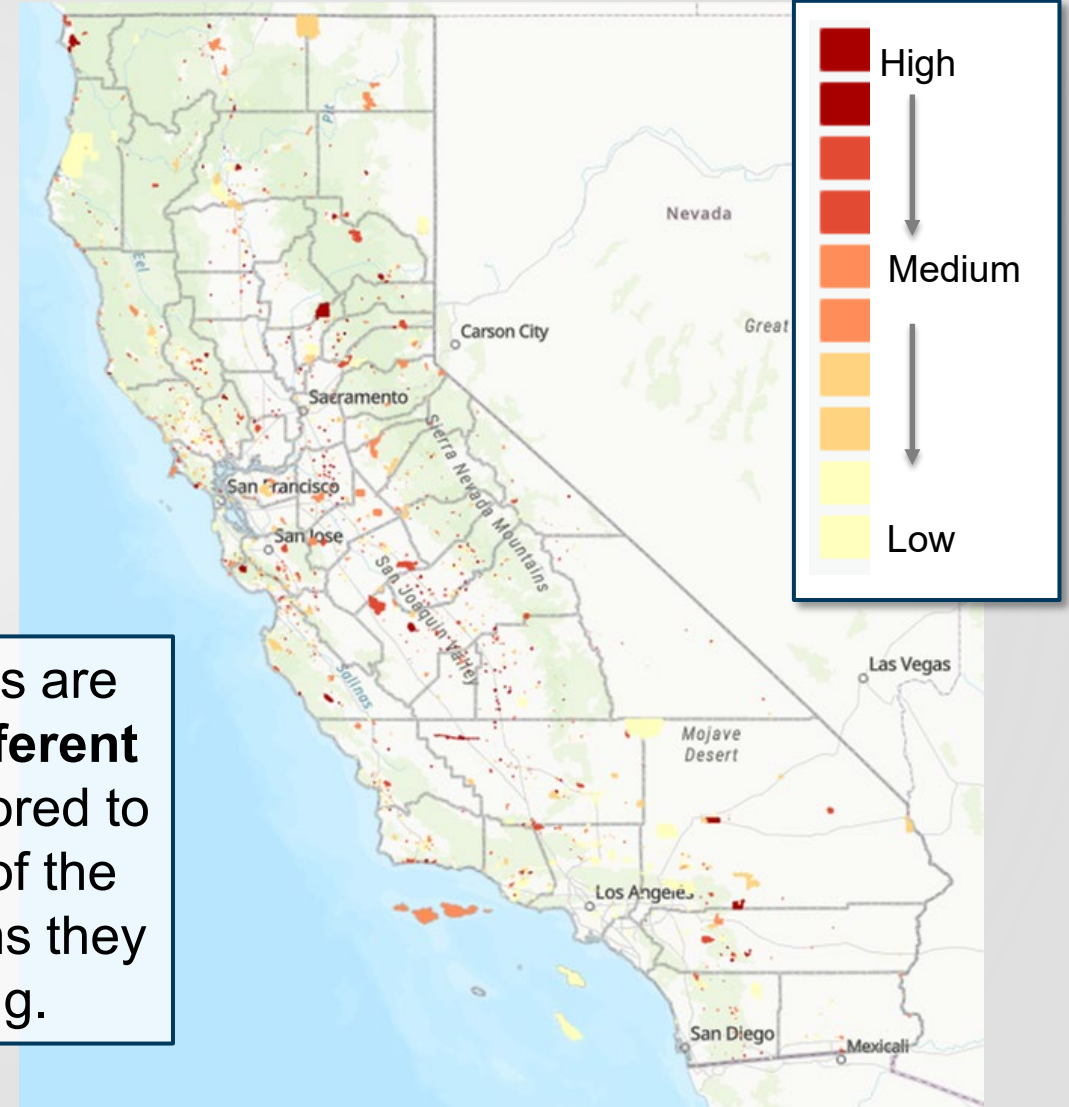


# Two sets of scoring are available...

## Domestic Wells & State Smalls

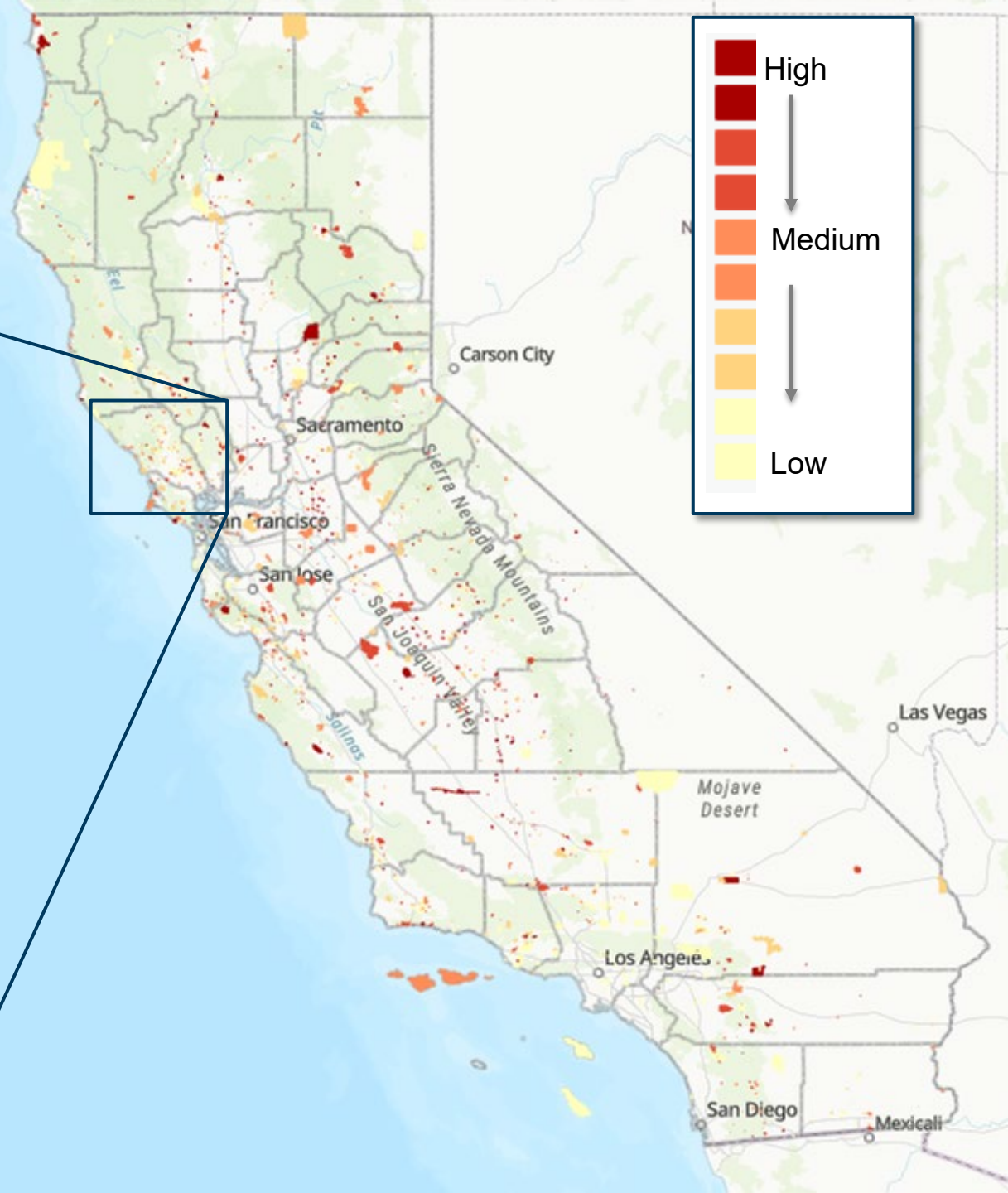
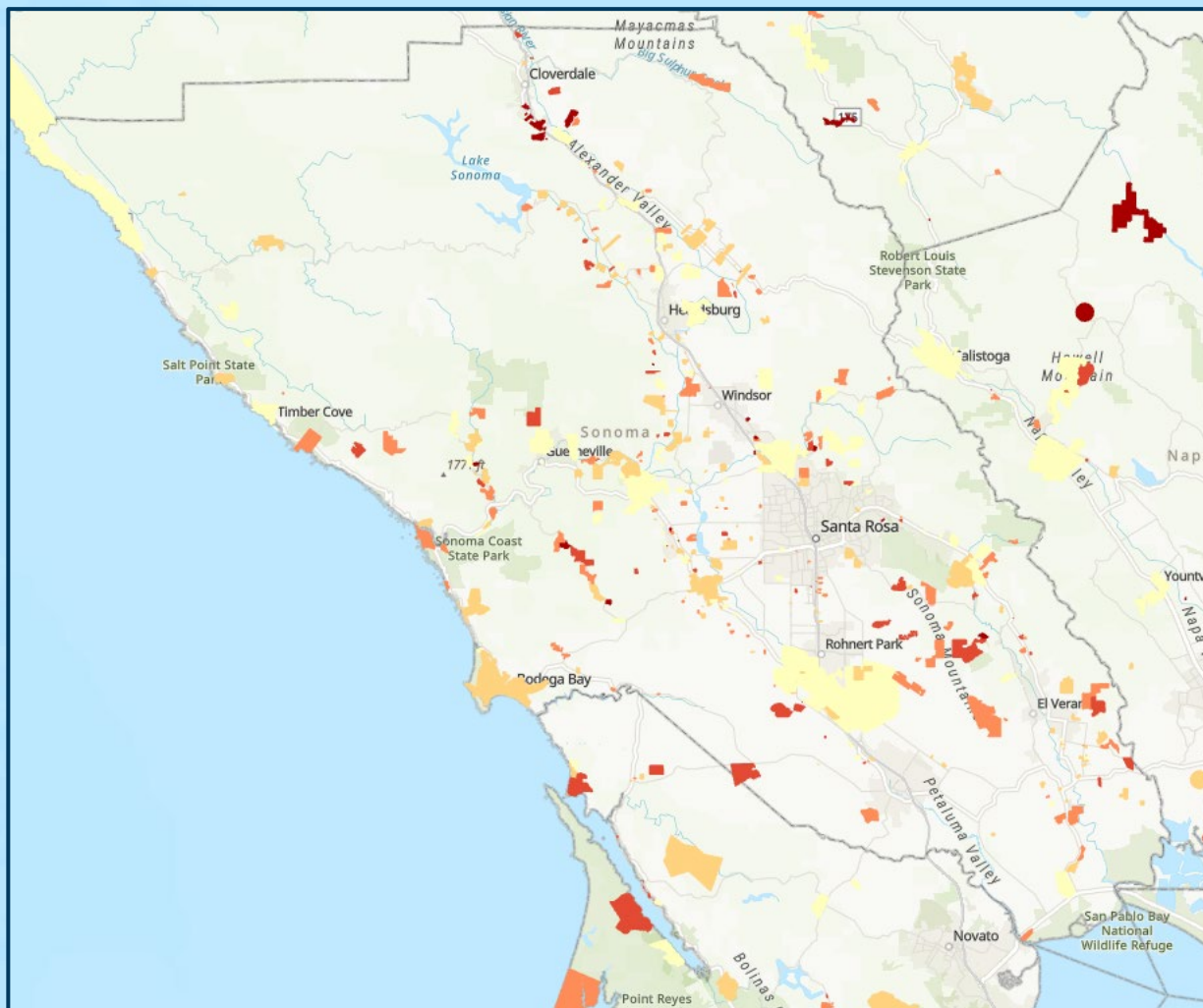


## Small Water Systems



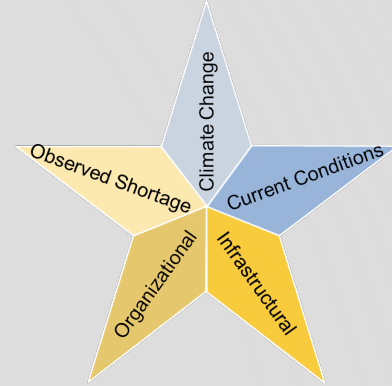
These scorings are made up of **different indicators**, tailored to the concerns of the types of systems they are targeting.

# SMALL WATER SYSTEMS: WATER SHORTAGE VULNERABILITY





# Small Water Systems Scoring: Water Shortage Vulnerability Indicators



## Climate Change Projections

- Temperature increase
- Sea level rise into coastal aquifers
- Wildfire increase

## Conditions & Events

- Current Dry Year
- Multiple dry years
- Wildfire Risk
- Fractured Rock Area
- Water Quality Risk
- Saltwater Intrusion
- Irrigated Agriculture

## Groundwater Only

- Subsidence
- Overdrafted Basin
- Chronic Declining Levels

## Infrastructural Vulnerability

- Intertie
- Emergency Intertie
- Single Water Source
- Single Source Types
- Source Monitoring
- Customers Unmetered
- Distribution Outage Record
- Water Level Status

## Organizational Capacity

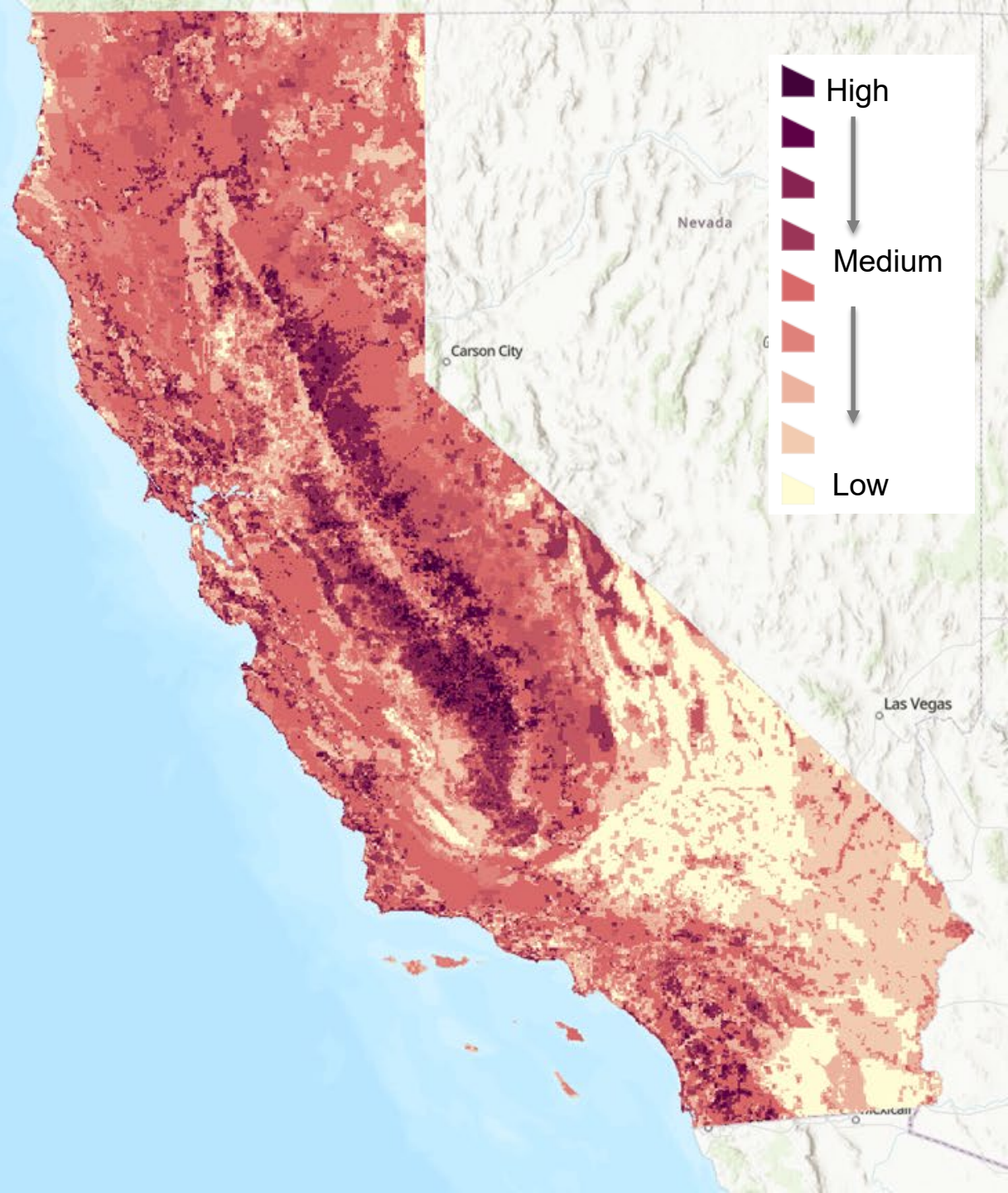
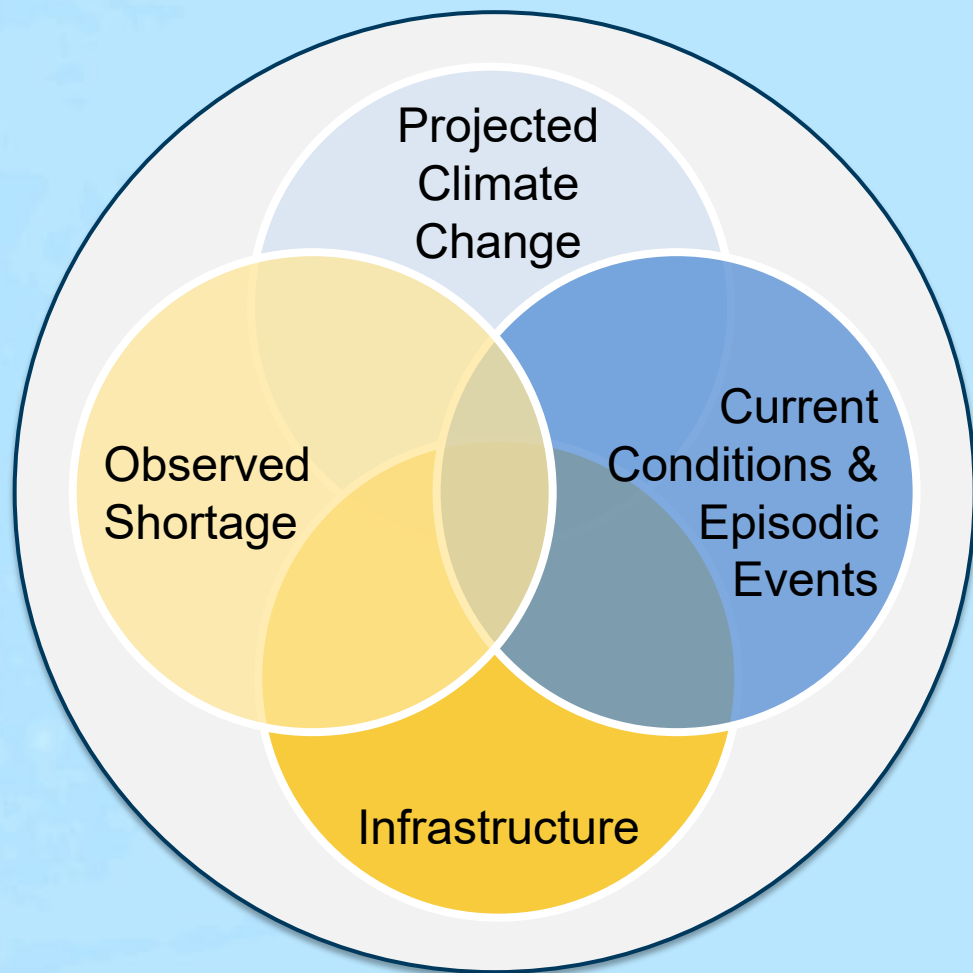
- Rate Last Updated
- Rate Type
- Supplier Size
- Drought Preparedness Plan

## Observed Shortage

- Source Capacity Violation
- Bottled / Hauled Water
- Technical Assistance Record
- Drought Impact Experienced



# DOMESTIC WELLS & STATE SMALLS: PHYSICAL VULNERABILITY



# DOMESTIC WELLS & STATE SMALLS: SOCIAL VULNERABILITY

## Socioeconomic Status

Below 2x Poverty

Unemployment

Per Capita Income

## Language & Education

No High School Diploma

Speaks English Less than Well

## Demographics

Aged 65 or Older

Aged 17 or Younger

Older than Age 5 with a Disability

Single Parent Households

## Housing & Transportation

Mobile Homes

No Available Vehicle

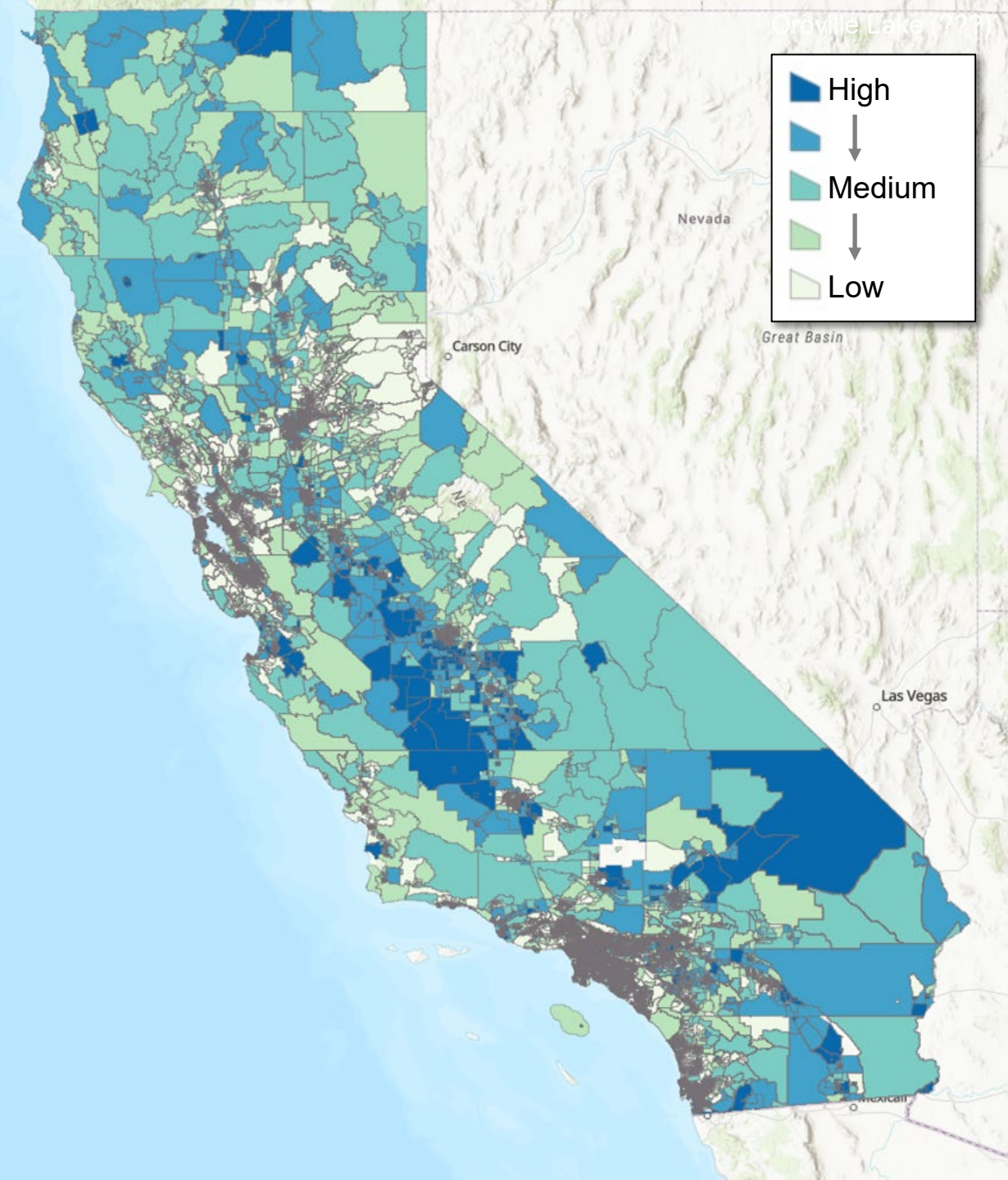
Crowded Housing

Multi-Unit Structures

Group Quarters

## Racial and Ethnic Makeup

Persons of Color







# Water Shortage Vulnerability

Explorer Tool

SB-552 Information

CA Water Watch

CA Groundwater Live

Download Data



Overview

Tutorial

Domestic Wells & SSWS

Small Water Systems

County Filter

Filter County:

- All -

Filter by Source Type

Water Source Type is

- All -

Ground and Surface Water

Groundwater Only

Surface Water Only

Filter by Water System Type

State Classification is

- All -

Map Layers

Legend

Add Data

Print

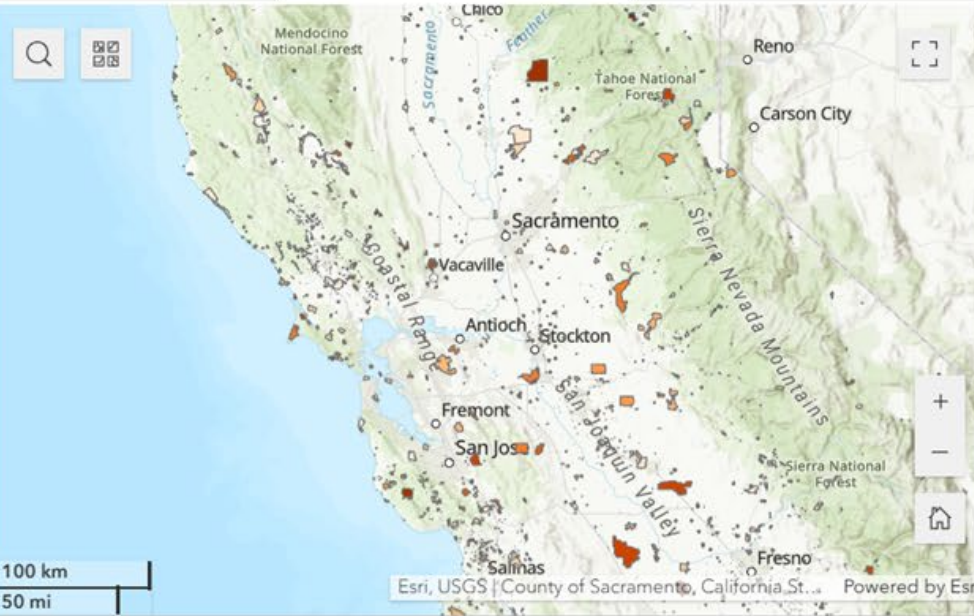
Layers

> ☐ California Counties

> ☒ Water Shortage Vulnerability - Small Water Systems

> ☐ Social Vulnerability

> ☐ Reference Layers



Number of Systems (in selection)

Water Source Type

Average Vulnerability Score >

## Number of Systems

# 4,225

Number of water systems in the filtered area

Search by Water System Name or ID

### TROUT GULCH MUTUAL WATER COMPANY

CA4400502: [View SDWIS Website](#)

County: **SANTA CRUZ**

The 2024 Water Shortage Vulnerability score for this water system is **51**. This score is **High Confidence**. It relies on **Groundwater Only**.

The state classification for this water system is **COMMUNITY**. The system has a total of **186** connections, serving an estimated population of **614**.

The [State Water Board's 2024 SAFER Risk Assessment](#) reports the following:

SAFER Failing Status: **Not Failing**

SAFER Risk Score: **Not At-Risk**

SAFER Water Quality Risk: **LOW**

### Climate Change Projections

Three climate change projections are included in the scoring to represent temperature change, sea level risk, and wildfire risk.

# Connections to SAFER Risk Assessment

## Water Shortage Vulnerability

**Lead:** Department of Water Resources

**Focus:** small water system, domestic wells, and state smalls water shortage vulnerability

**Purpose:** Maintain and update risk and vulnerability indicators to water shortage

**Legislative mandate:** SB 552 (2021)

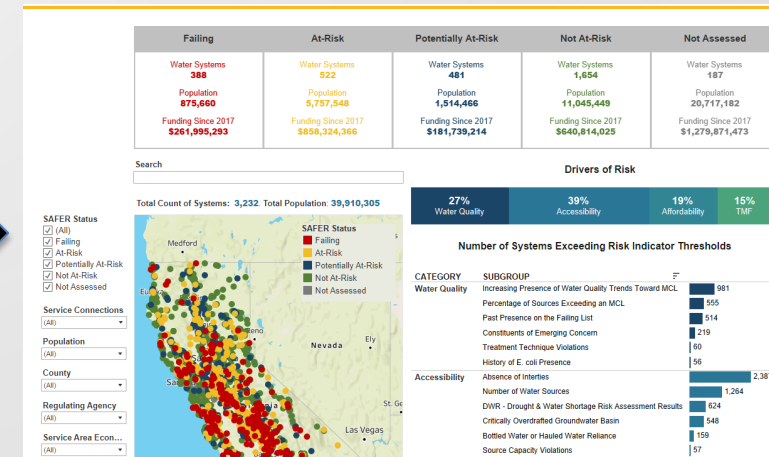
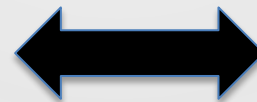
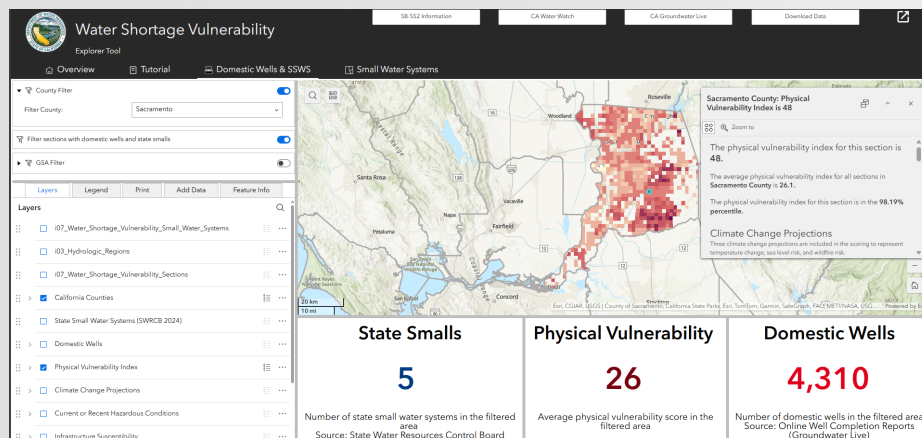
## SAFER Risk Assessment

**Lead:** State Water Board

**Focus:** small water system, domestic wells, and state smalls water shortage vulnerability

**Purpose:** Identify funding needs to achieve safe drinking water (quality, affordability, and accessibility)

**Legislative mandate:** SB 200 (2019)



#### Discussion Questions:

- Are there more needs to identify prior to developing next step recommendations for DACs and vulnerable communities?
- To what extent can Water Infrastructure address the vulnerabilities?
- What does that mean for a possible DRIP recommendation?

# IDENTIFYING PLANNING GAPS AND SOLUTIONS FOR VULNERABLE COMMUNITIES

(10 MINUTES)



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# Identifying planning gaps and solutions for vulnerable communities

Recommendation Lead: Kyle Jones / Carolina Hernandez



Previous thoughts on preliminary ideas

- Address "single point of failure" for water system reliability/ resilience
- Costs considerations and scale, can affect smaller, more rural communities
- Rethink eligibility beyond DAC status, include smaller, but solvent water systems



**What type of projects are a concern as a "single point of failure"?**

How would those projects be captured and described in a recommendation regarding the support for vulnerable communities?



**How can a recommendation inform on how grant funding guidelines could be written to capture intended vulnerable communities?**

How does this target the important water infrastructure improvements needed to address "single point of failure" in local water systems?



#### Discussion Questions:

- What outcomes are we looking for that can be addressed through system and regulatory flexibility?
- Then how do we get there?
- Should the scope be more specific to types of water users, status of DAC or vulnerability, locations?
- Is there enough general understanding of what water infrastructure improvements would constitute increased flexibility?

# IMPROVE SYSTEMS AND REGULATORY FLEXIBILITY

(10 MINUTES)



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# Improve systems and regulatory flexibility

Recommendation Lead: Laura Ramos / Katie Ruby



Previous thoughts on preliminary ideas

- Small scale conveyance projects and interties
- Flexible funding beyond bonds
- Increase streamline regulatory process for broadly accepted projects (while lowering the cost)
- Use existing infrastructure for more uses (ex, flood control facilities for temp detention basins & recharge)



## **What is the issue that flexible funding would address?**

Is there a need to have bond funding more flexible for implementation or is there a need for more funding beyond bonds?



## **Is a potential recommendation addressing shortening the regulatory process for specific projects?**

Is this looking to modify the Cutting the Green Tape or have a similar approach to water infrastructure projects for vulnerable communities?



## **How does a recommendation address multi-use for existing infrastructure?**

Are there more examples to refer to that this idea of a recommendation could address for water infrastructure improvements?



CALIFORNIA DEPARTMENT OF  
**WATER RESOURCES**



#### Discussion Questions:

- Could this idea of a recommendation be clearer and more specific?
- Is the use of nature-based solutions a recommendation when designing and constructing water infrastructure to support ground water recharge?
- What is the idea of a “new water source” and would it require other authorities and rights?

# GROUNDWATER RECHARGE AND NATURE BASED SOLUTIONS BE INCLUDED AS NEW WATER SOURCES

(10 MINUTES)

# Groundwater recharge and Nature Based Solutions be included as new water sources

Recommendation Lead: Kyle Jones / Emily Rooney



Previous thoughts on preliminary ideas

- Water infrastructure to support the movement of water for groundwater recharge
- Place infrastructure in a "natural location"
- New water sources – groundwater already identified in the Strategy as a new water source

**As ideal and preferred locations for groundwater recharge are being identified, what water infrastructure will be needed?**

Is water infrastructure only fish screens, pumps, pipes, and canals or is it also filtration and effluent treatment for non-stream flow sourced water supply for groundwater recharge?

**What do we mean by "natural location"?**

What language would a recommendation need to describe and identify "natural location"?

**Why is groundwater being proposed as a new water source?**

Is this attempting to address other needs to see groundwater as a "new source" (e.g., accounting, measurement, containment, etc.)?



#### Discussion Questions:

- How to further conceptual ideas into draft recommendations?
- Which conceptual ideas for recommendations come to the forefront before others?
- Timing and suggestion on how to handle these conceptual ideas if they are not moved forward now?

## OTHER RECOMMENDATION IDEAS

(30 MINUTES)

# Other recommendation ideas discussed...

## How should we address these ideas?

- Support regional/local water infrastructure long-term planning
- Develop green infrastructure investment plan intended for more fish and flows while identifying opportunities to remove non-beneficial water supply infrastructure
- Identify partnership opportunities in the San Joaquin Valley
- Improve special districts and planning districts coordination





# PUBLIC COMMENT

# NEXT STEPS

# What's Next

**JUNE:** Workgroup virtual meetings to learn more and continue advancing through recommendation ideas.

- **Other DRIP Collaborative Workgroups:**

- **June 27<sup>th</sup>** – Learning Session: Land Use Repurposing
- Other DRIP Collaborative members, as well as members of the public, may join these workgroup meetings

**JULY 18:** DRIP Collaborative meeting (in-person)

- Continue process for new recommendations



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**Adjourn**

Recording will be posted to <https://water.ca.gov/DRIP>

**Thank you!**