



California DRIP Collaborative

Drought Resilience Interagency & Partners (DRIP) Collaborative Meeting

Friday April 17, 2026
California Natural Resources Agency
715 P Street, Sacramento, CA
Room 02-221 A/B/C (Second Floor)

Meeting Information

1. This meeting is being live streamed and recorded.
2. Members of the public are welcome to listen. Public comments will be taken throughout the meeting.
3. Please practice electronics courtesy and turn off or mute your cell phones.
4. All viewpoints are welcome; we look forward to engaging, innovative, thoughtful, and respectful discussions!

Paul Gosselin, CA Department of Water Resources – Deputy Director of Sustainable Water Management

WELCOMING REMARKS

Meeting Objectives

- Objective #1:** Provide opportunities for collective learning about efforts to advance drought and water shortage resiliency.
- Objective #2:** Share progress and solicit additional input on the two key initiatives (R&R and DI&M)
- Objective #3:** Present information on the Water Plan Update 2028 and California water rights

Meeting Agenda

1. Welcoming Remarks and Setting Intentions
2. Orientation to the Work of the DRIP Collaborative
3. Hydrology Report and Drought Outlook
4. Accomplishments Related to the 2024 /25 DRIP Collaborative Recommendations
5. Roles & Responsibilities for Domestic Wells and State Small Water Systems
6. LUNCH [12:30pm - 1:30pm]
7. Drought Indicators and Metrics
8. BREAK [3:00pm - 3:15pm]
9. Water Plan Update - Presentation
10. California Water Rights - Presentation
11. Public Comment
12. Closing Remarks

DRIP Collaborative (Quorum is 14)

1. **Alexandra Biering**, California Farm Bureau
2. **Katy Landau**, California Environmental Protection Agency
3. **Alvar Escriva-Bou**, University of California, Davis
4. **Mike Myatt (for Anna Schiller)**, Environmental Defense Fund
5. **Brent Hastey**, Plumas Lake Self Storage, Owner
6. **Charles Delgado**, California State Association of Counties
7. **Carolina Hernandez**, Los Angeles County Public Works
8. **Chelsea Haines**, Association of California Water Agencies
9. **Joshua Cahill**, Yurok Tribe
10. **Karen Mogus (for Joaquin Esquivel)**, State Water Resources Control Board
11. **Laura Ramos**, California Water Institute at Fresno State
12. **Maria Gallegos Herrera**, Rural Community Assistance Corporation (RCAC)
13. **Mariko Falke**, California Department of Water Resources - Tribal Affairs Office
14. **Nate Ortiz (for Christina Curry)**, California Office of Emergency Services

15. **Paul Gosselin**, California Department of Water Resources
16. **Samantha Arthur**, California Natural Resources Agency
17. **Sierra Ryan**, Santa Cruz County
18. **Suzanne Pecci**, Domestic Well Advisory Group, South American Subbasin
19. **Rhett Anderson (for Tami McVay)**, Self Help Enterprises
20. **Tim Worley**, California Association of Mutual Water Companies
21. **Virginia Jameson**, California Department of Food and Agriculture

Additional Members:

22. **Emily Rooney**, Agricultural Council of California
23. **Nataly Escobedo Garcia**, Leadership Counsel for Justice & Accountability (alternate for Community Water Center) - *attending virtually*
24. **Emiko Burchill**, California Department of Fish and Wildlife
25. **Natalie Kuffel**, Governor's Office of Land use and Climate Innovation
26. **Redgie Collins**, California Trout Inc.

Welcome to New Members and Alternates

Introducing

Alex Biering, California Farm Bureau

Chelsea Haines, Association of California Water Agencies (ACWA)

Charles Delgado, California State Association of Counties (CSAC)

Rhett Anderson, Self-Help Enterprises (SHE)

Mike Myatt, Environmental Defense Fund (EDF)

Nataly Escobedo Garcia, Leadership Counsel for Justice & Accountability
(alternate for Community Water Center) - *attending virtually*



DRIP Collaborative Purpose: Facilitate proactive state planning and coordination, both for predrought planning and mitigation, emergency response, and post-drought management, and to develop strategies to enhance collaboration between various fields, for all types of water users. (Water Code §10609.80., subd. (b))

Glen Low, The Earth Genome

ORIENTATION TO THE WORK OF THE DRIP COLLABORATIVE

2026 DRIP Collaborative Engagement Timeline



Any questions on the process for this year?



In-Person Meeting



Virtual Meeting

Key Themes from 2023, 2024, and 2025

2023

(Year 1)

"Puzzle pieces. **DRIP Collaborative is the forum to put those puzzle pieces together.** A collaborative forum to find the connections and synergies." – State Agency

"We need to find the right pace for this work, so we're not in a panic (like in 2014) or complacent. We need to institutionalize drought planning. **Dedicated, not sporadic.**" – State Agency

Challenge: **Focus.** 100+ suggestions of items to work on together. Should DRIP work on regulatory changes?

2024

(Year 2)

"Feeling very proud of what we've done. **Consensus is no small feat on CA water issues**" – Non-State

"Approving these recommendations is a **testament to the process working.**" – Non-State

Challenge: **Implementation.** Should DRIP do implementation? How do we take approved recs and ensure progress?

2025

(Year 3)

"Lot of work already underway on a complicated topic. **Is there a deliverable that would be valuable and to whom?**" – Non-State

"With possible drought, is DRIP good at **balancing response (near-term) with resilience (long-term)?**" – State Agency

Challenge: **Complexity.** Need lot of base knowledge, expertise and time to find best DRIP role (Inform, Complement or Lead)

Creative tension: DRIP value add role, appropriate scope, available resources.
"High Impact, Efficient Effort"

Year 4: Impact on Urgent Items

Year 1
Foundation Building
Shared process, initial ideation (needs, solutions), engagement

2023

Year 2
Building Muscle
Content work, focused on early wins and demonstrating success

2024

Year 3
Scaling Impacts
High impact, more difficult work.
System change (as needed)

2025

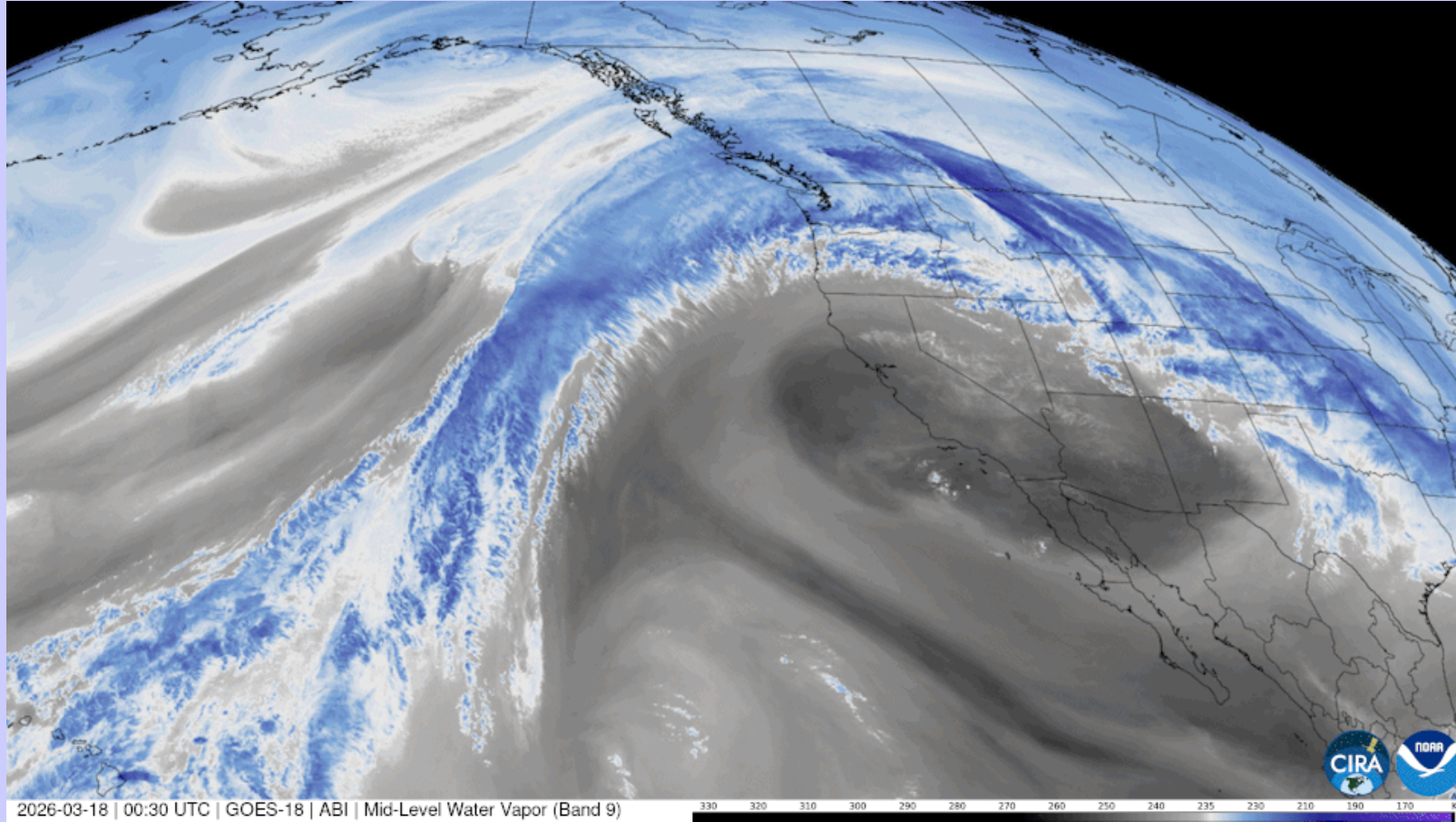
Year 4
Moving to Action
Work to address issues with near term impacts

2026



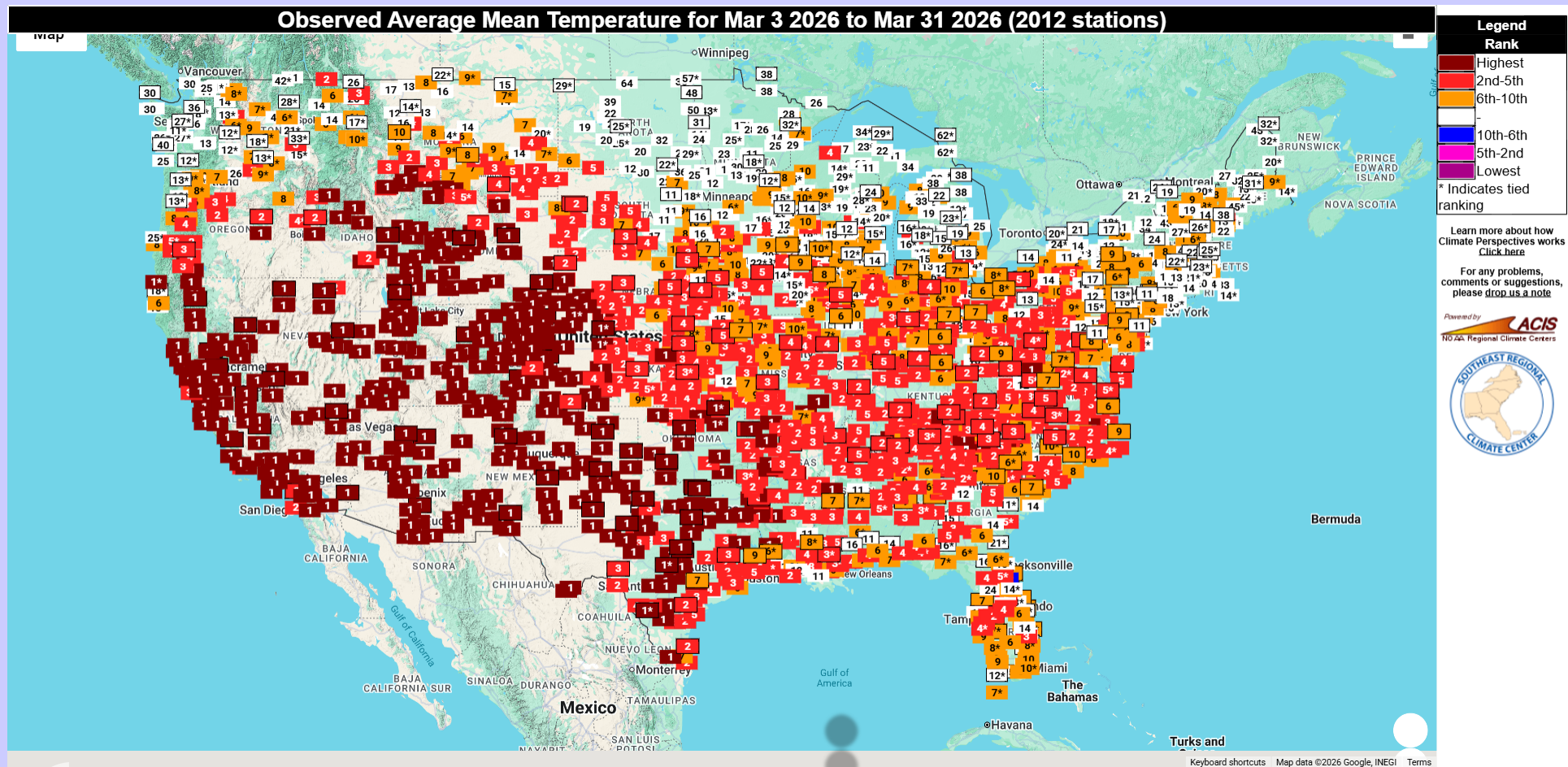
Jeanine Jones, Interstate Resources Manager, Executive Branch, Department of Water Resources

HYDROLOGY REPORT AND DROUGHT OUTLOOK

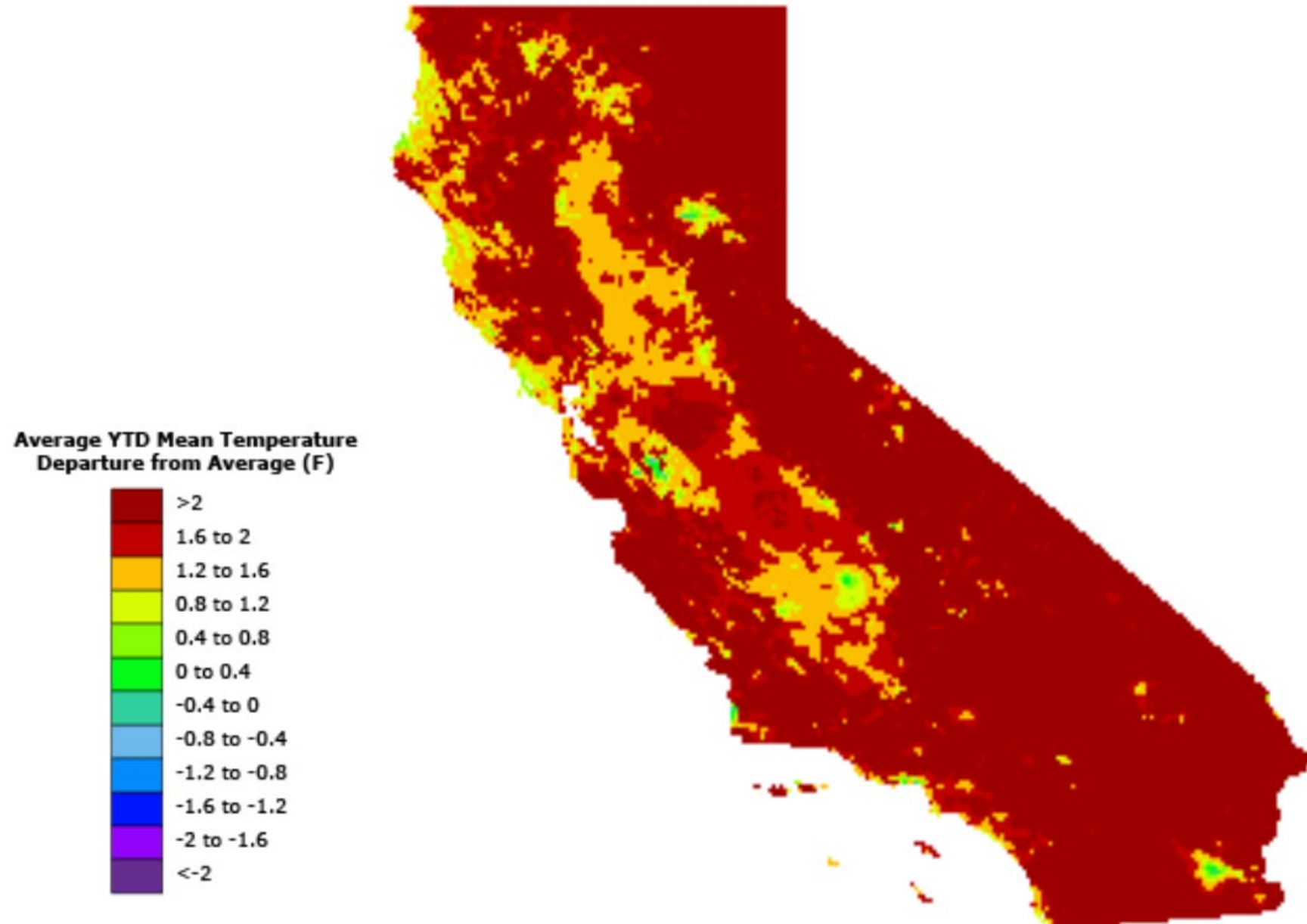


Hydrologic Conditions & Water Supply Outlook

Jeanine Jones, California Department of Water Resources



Average YTD Mean Temperature Departure from Average Temperature - 04/13/2026



Precipitation Statistics (period of record: 1981-current)

Statewide as of 04/13/2026

Water Year to Date: **20.46"**

% of Average: **99%**

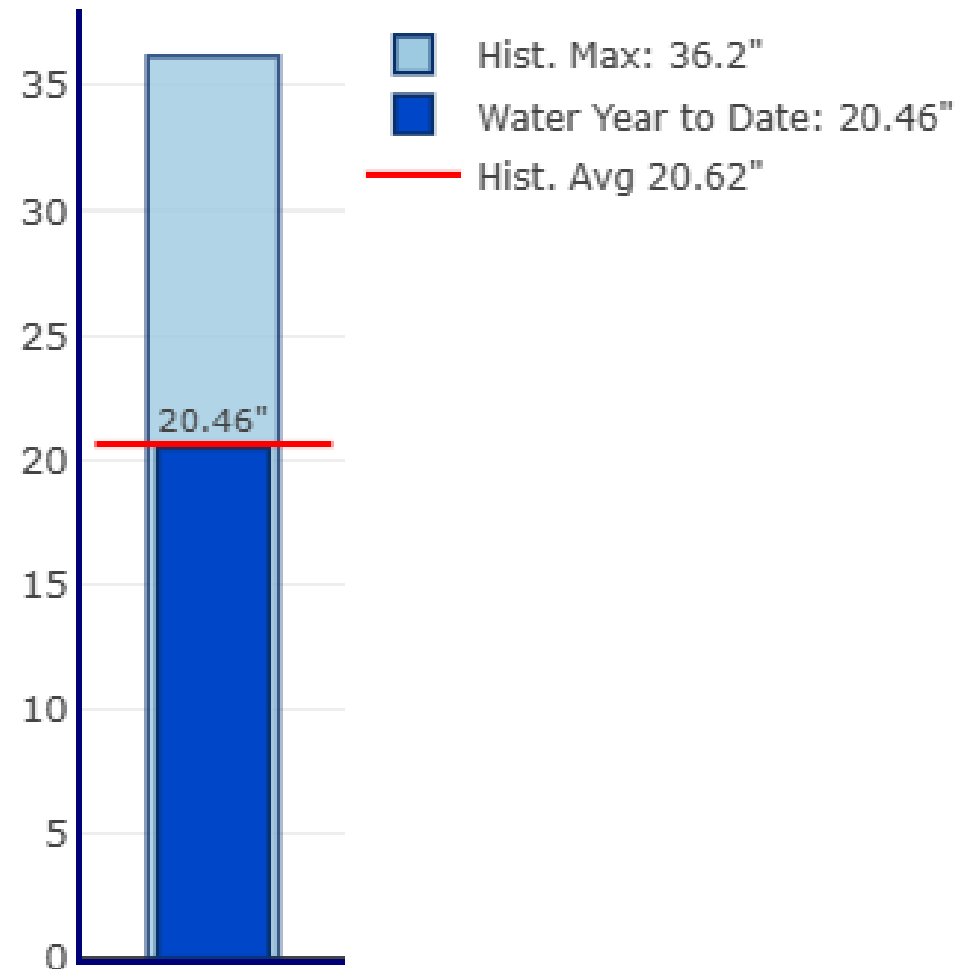
Precipitation % of average for
full water year through
September 30th: **86%**

Historical Record to Date:

Max: **36.2"**

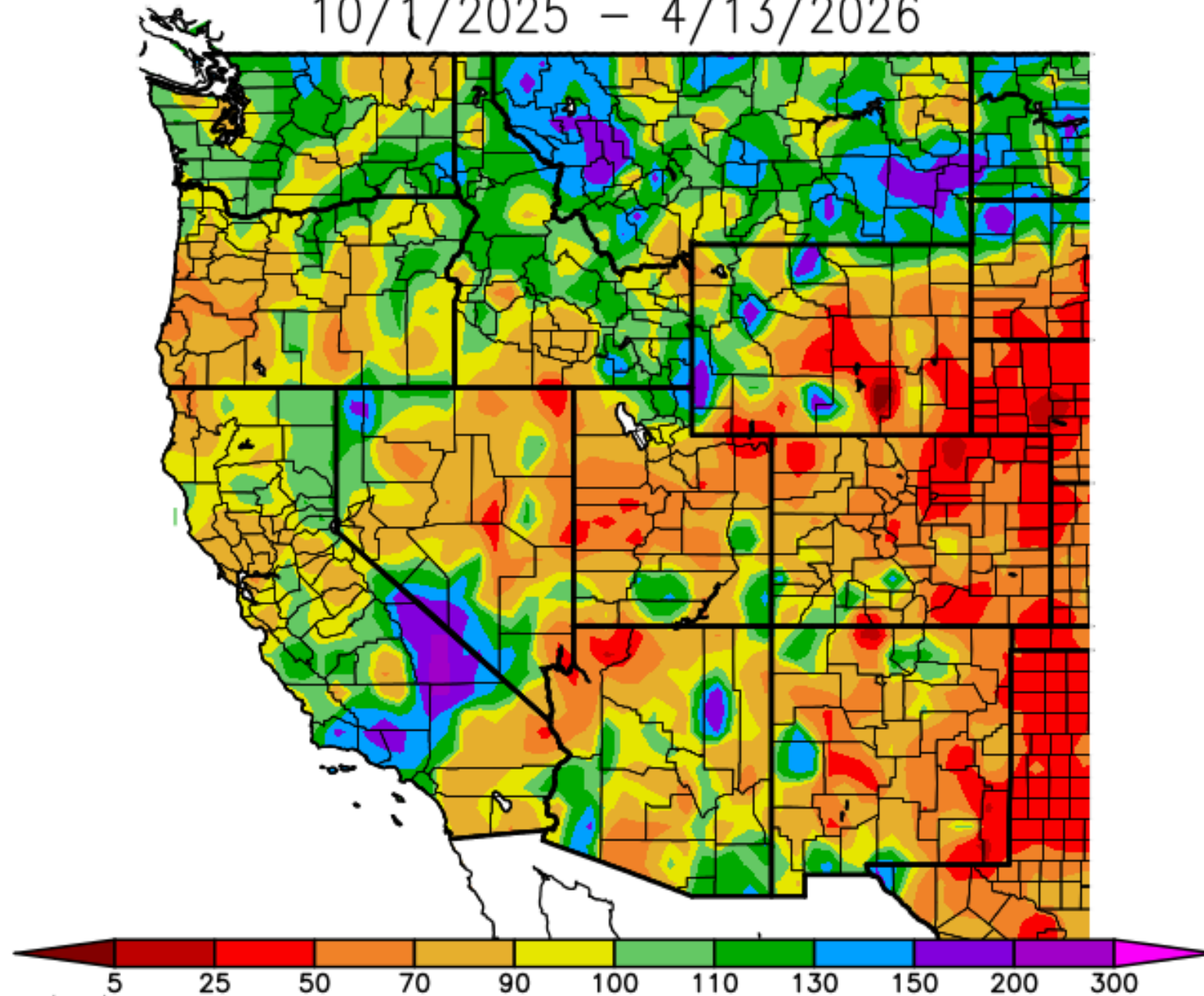
Mean: **20.62"**

Min: **10.65"**



Precipitation for water year to date is
99% of historical average

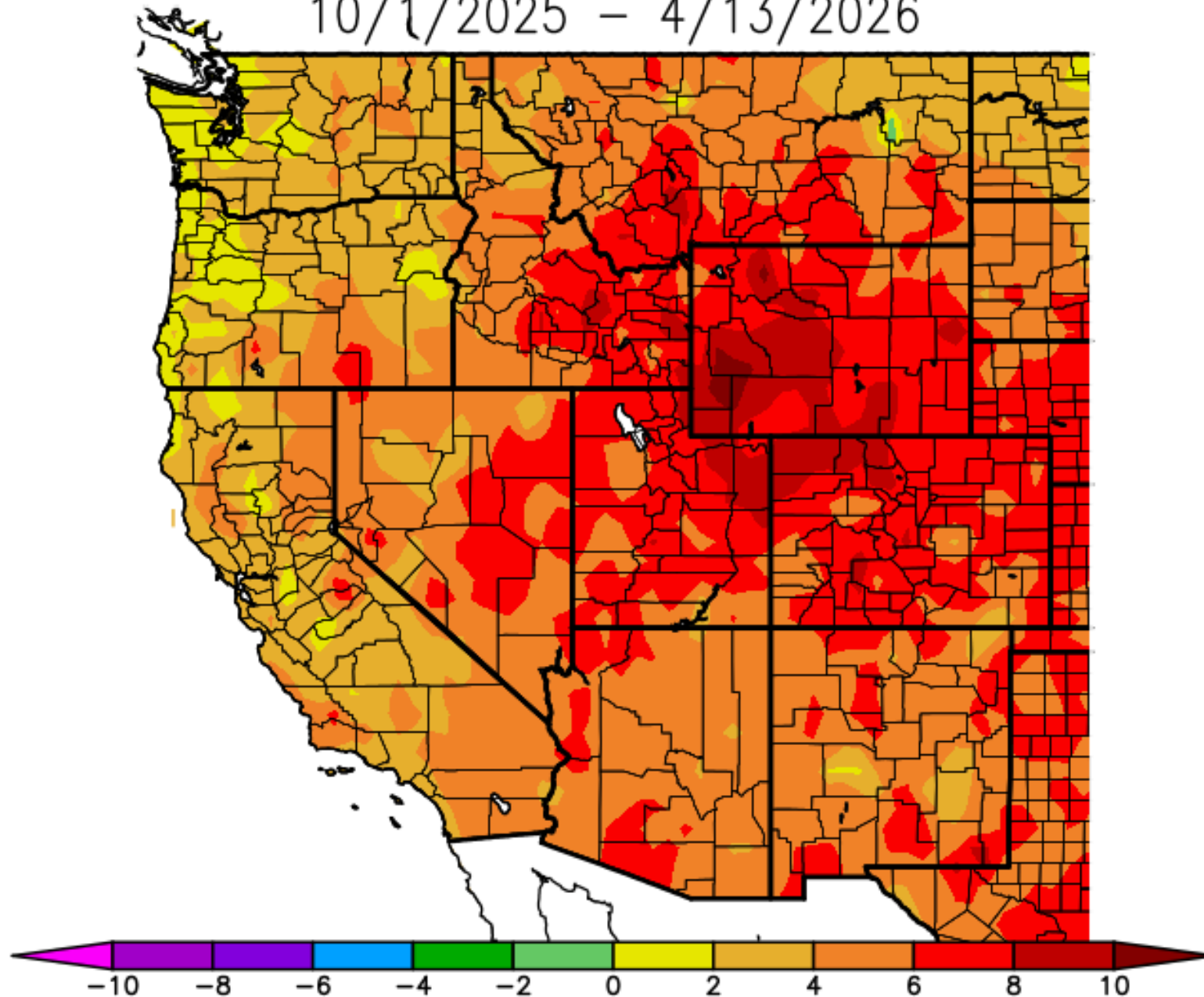
Percent of Average Precipitation (%) 10/1/2025 – 4/13/2026



Generated 4/14/2026 at WRCC using provisional data.

NOAA Regional Climate Centers

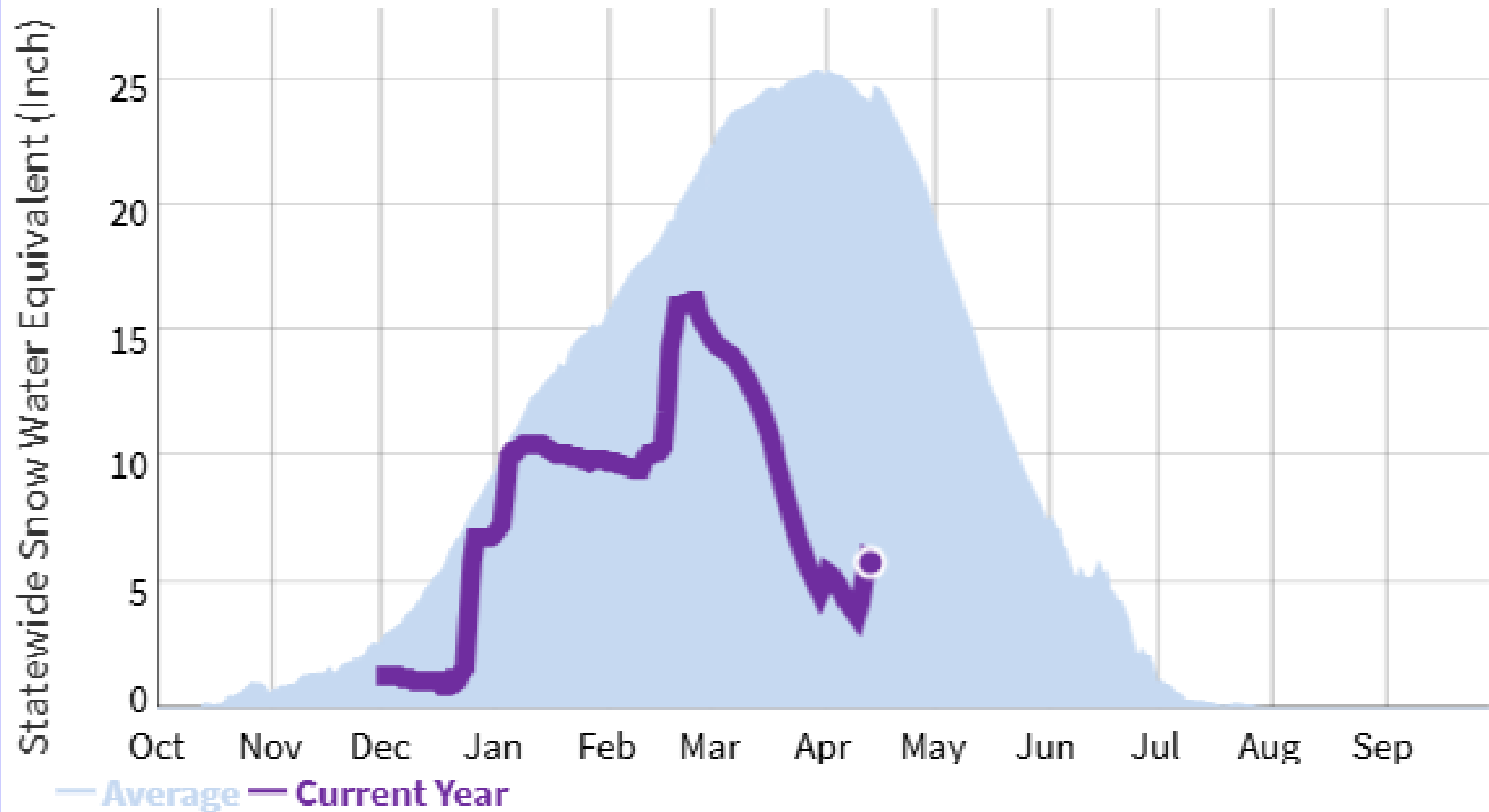
Ave. Temperature dep from Ave (deg F)
10/1/2025 – 4/13/2026



Generated 4/14/2026 at WRCC using provisional data.

NOAA Regional Climate Center

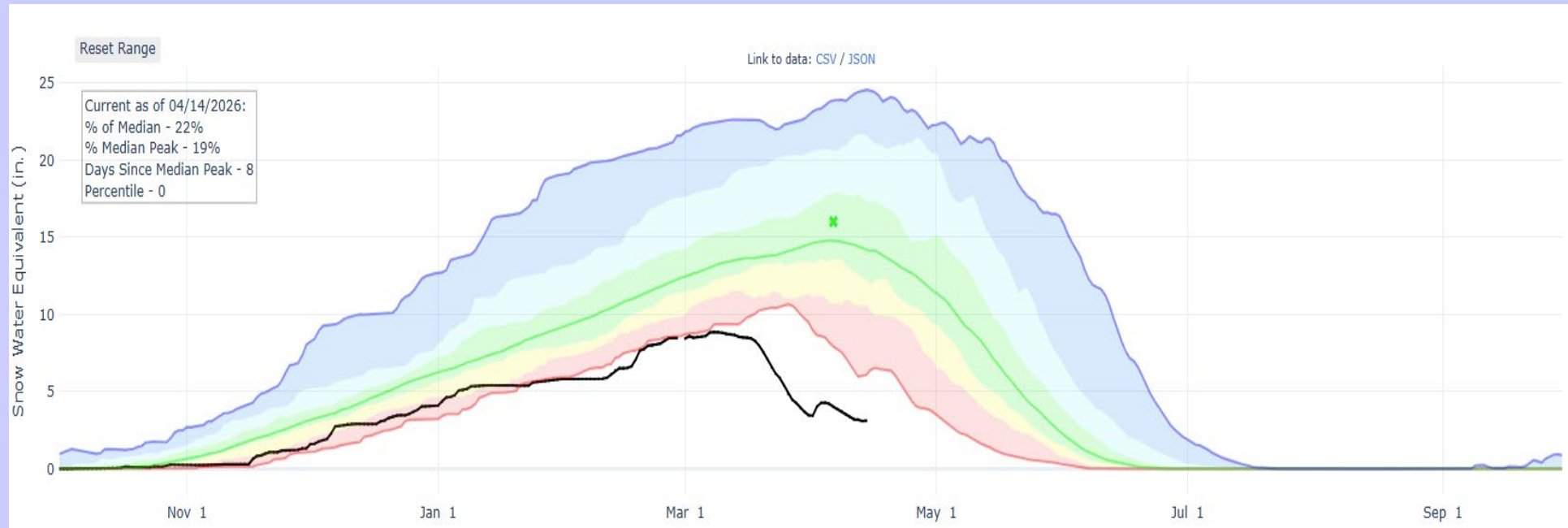
Statewide Snowpack Chart as of 04/13/2026



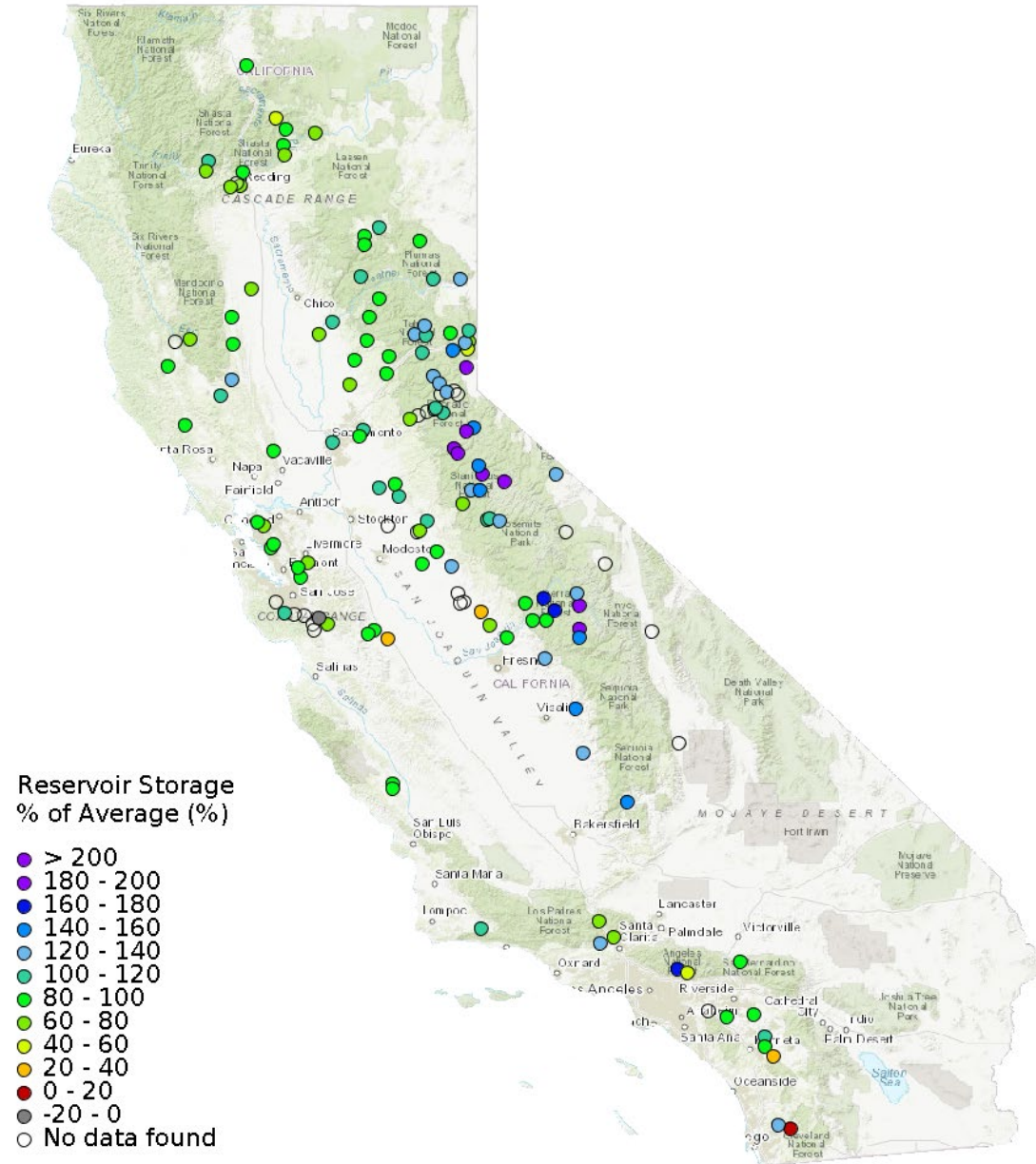
Percent of normal to date: 23%

Percent of April 1st average: 22%

Upper Colorado Region Snow Water Equiv.



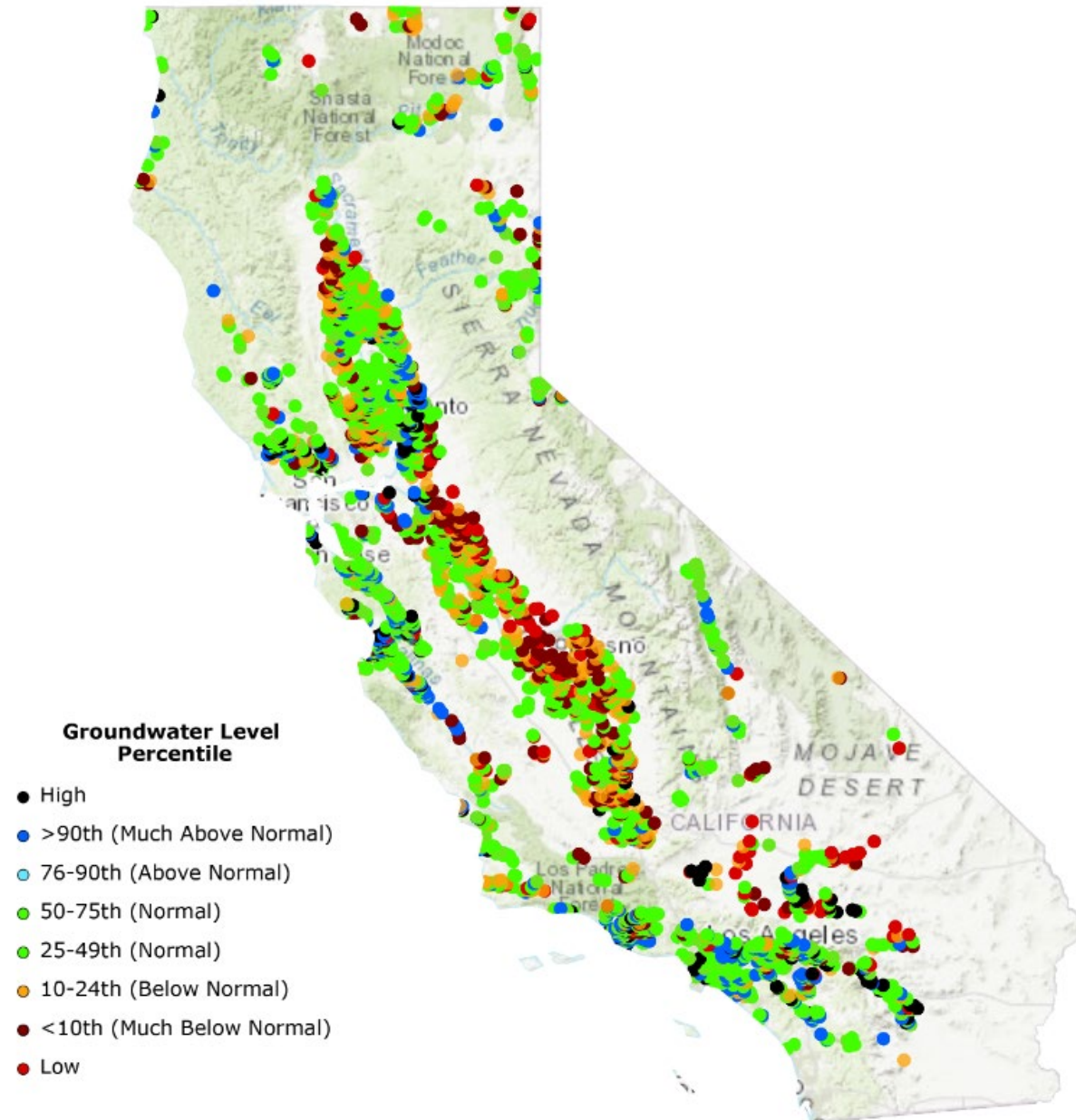
Reservoir Storage % of Average - 04/13/2026



Water Project Allocations

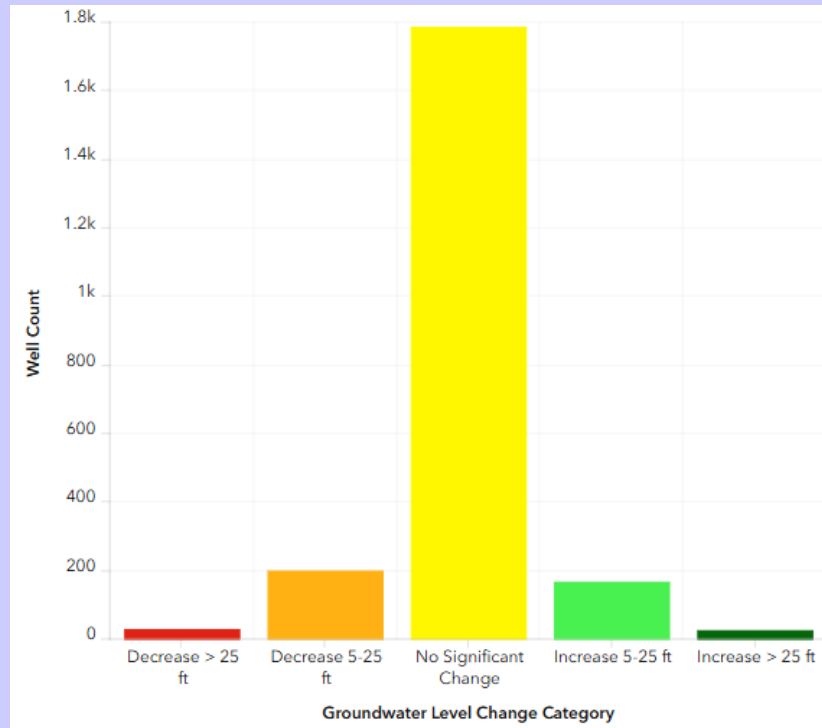
- SWP: 30%
- CVP
 - North of Delta: 100% Ag & M&I
 - South of Delta: 20% Ag, 70% M&I
 - Eastside: 0%
 - Friant Class 1: 100%

Groundwater Level Percentile - 04/12/2026

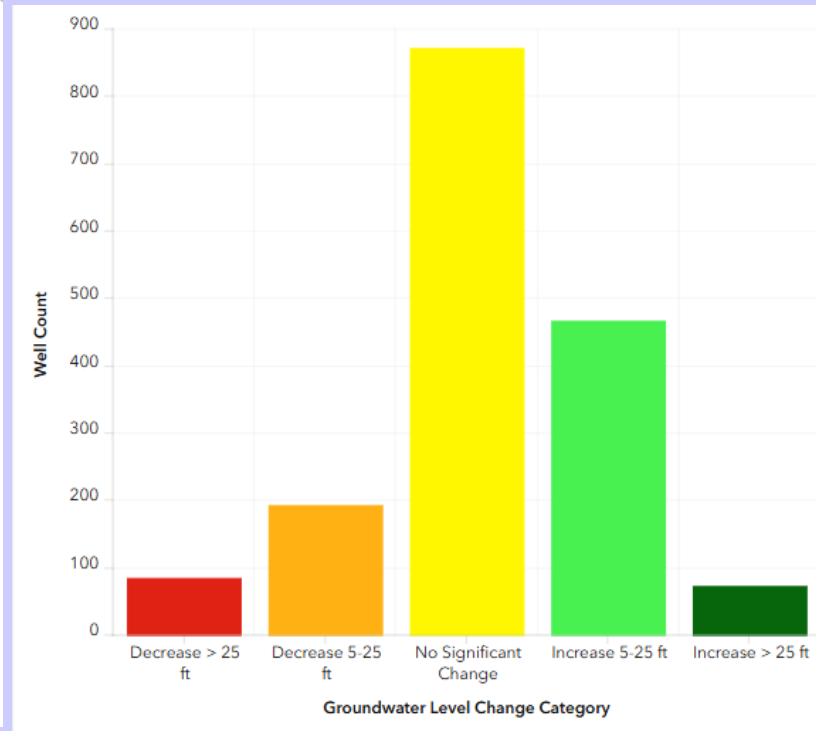


Groundwater Level Change

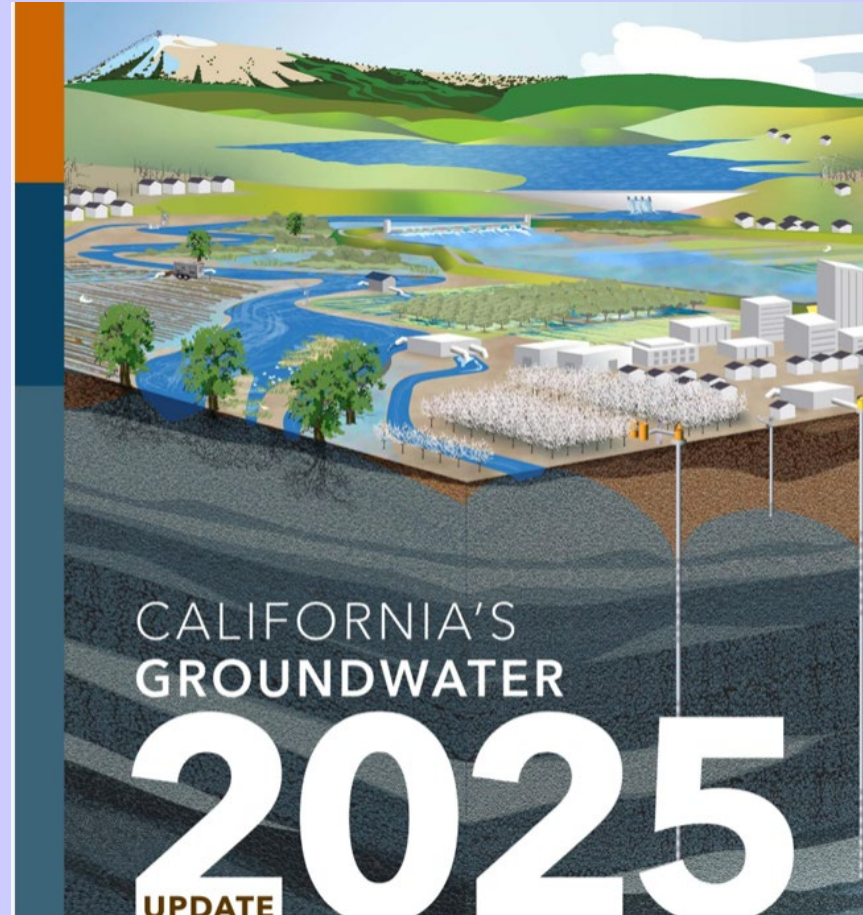
1-Year Change (2.2k wells)



10-Year Change (1.7k wells)



Final DWR Report Released in March



Groundwater Administrative Updates

- Proposed AB 2026 would amend existing statute for flood recharge diversions (Water Code Sec. 1242.1, enacted 2023). (499 AF diverted in WY 2025, 98 AF in WY 2026).)
- In February SWRCB issued 9 temporary recharge permits (6-month & 5-year) for current wet season authorizing 43 TAF of diversions. (WY 2015-2025: 44 permits authorized for 1.5 MAF of diversions, 58 TAF diverted)
- April 30th DWR workshop for next FY's Prop. 4 grants for sustainable groundwater management

WEATHER • 5 MIN READ

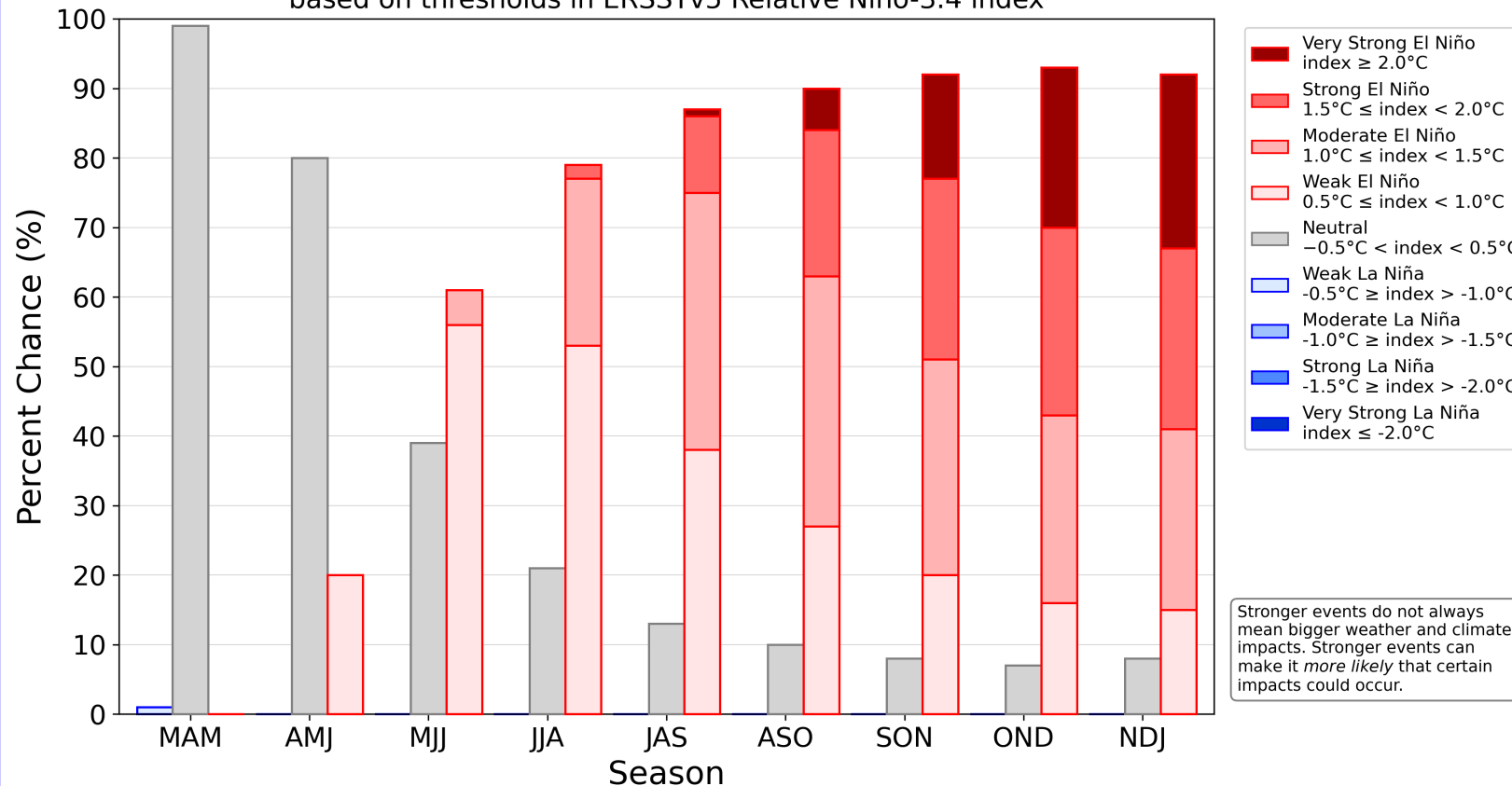
A Super El Niño is coming. Here's how a hotter ocean could change the weather near you

APR 7, 2026

By  [Andrew Freedman](#)

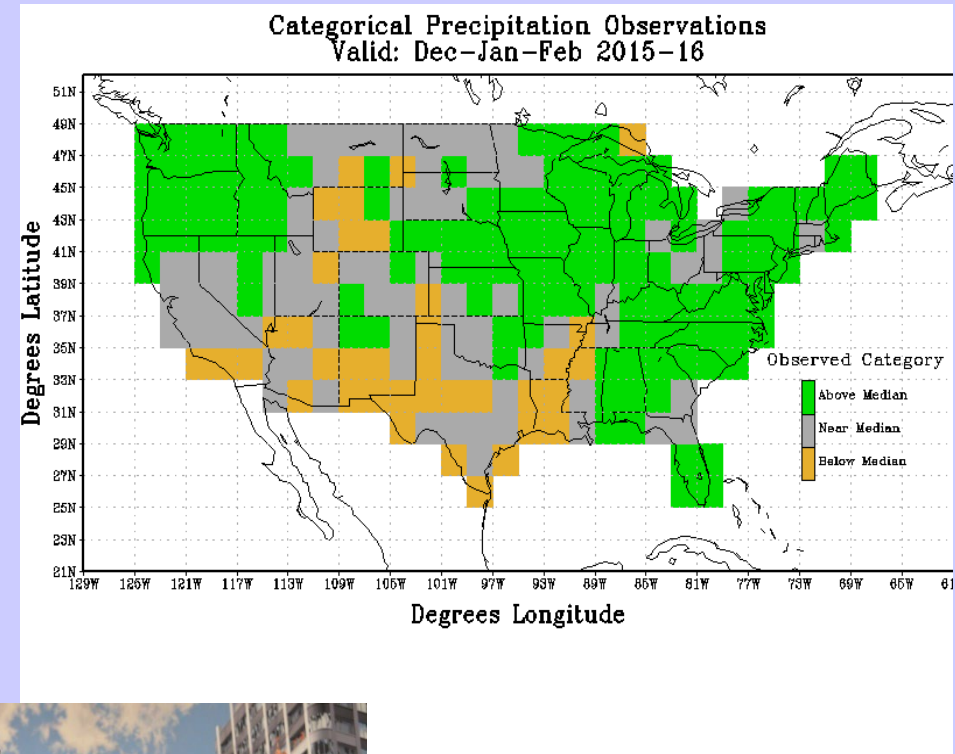
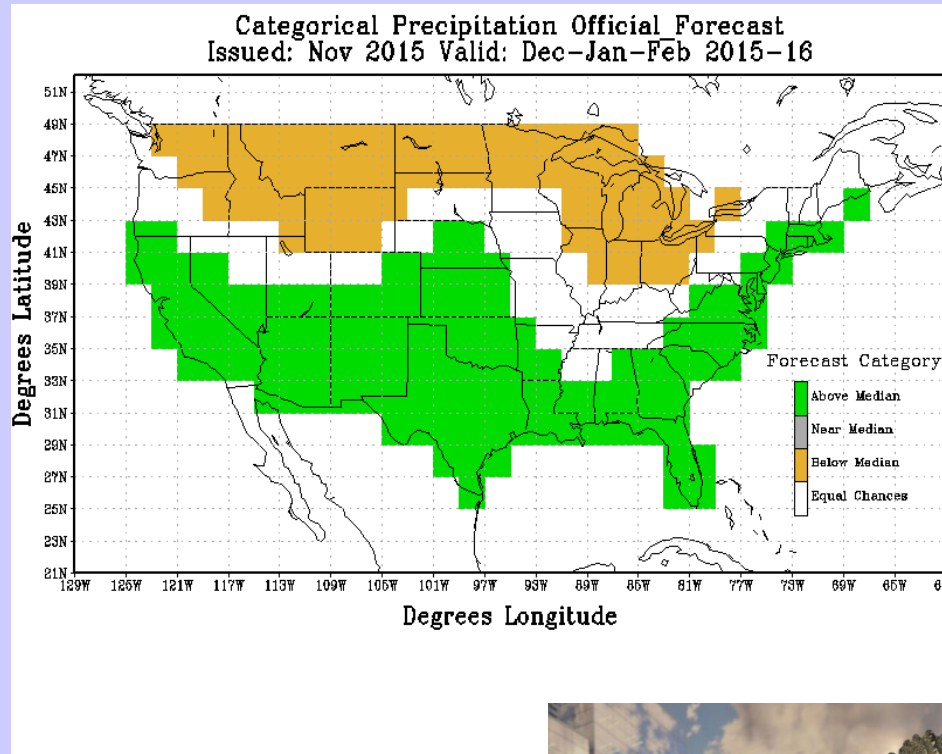
NOAA CPC ENSO Strength Probabilities (issued April 2026)

based on thresholds in ERSSTv5 Relative Niño-3.4 index



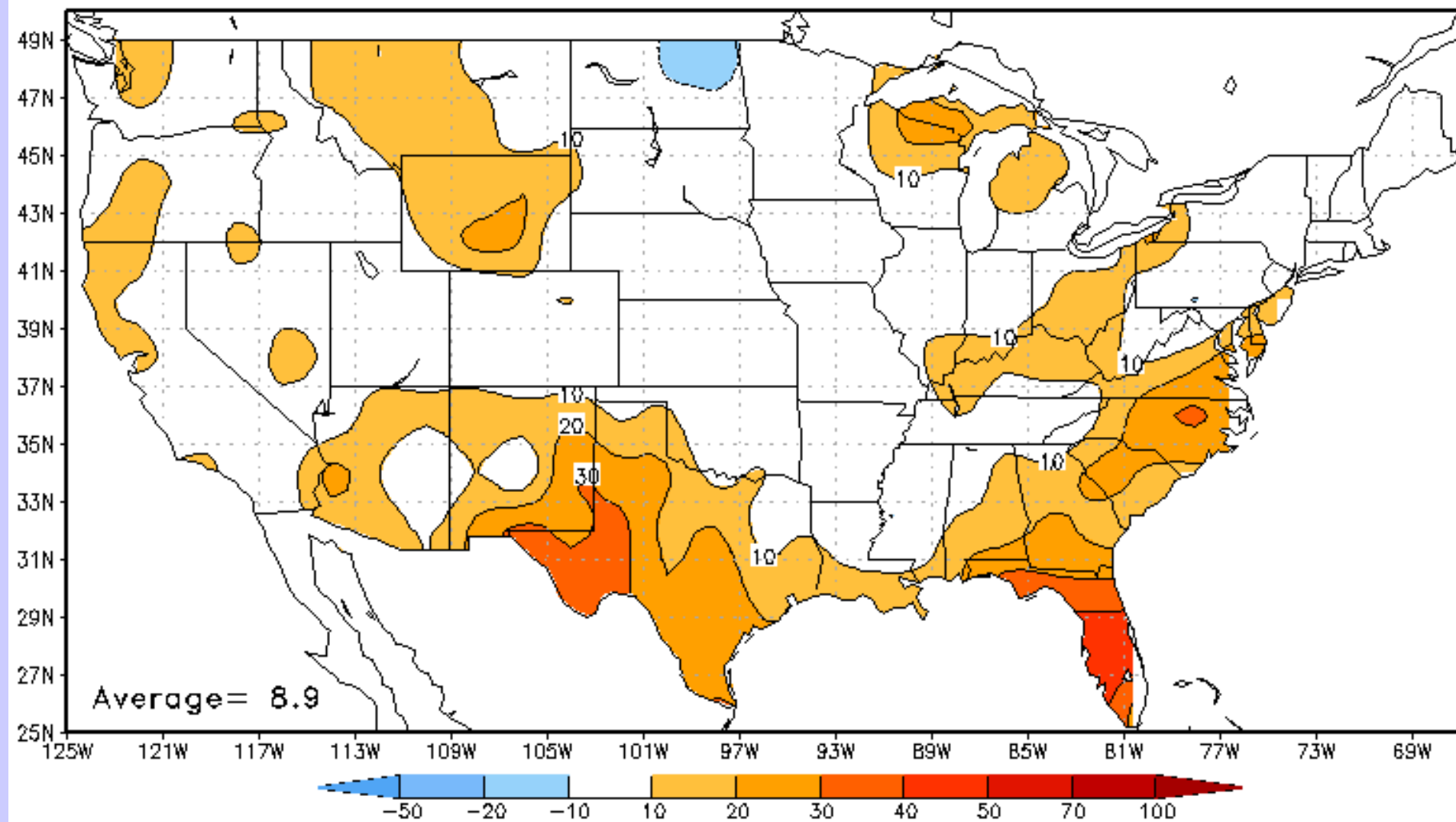


Water Year 2016, Year 5 of California's Prior Drought



Remember the
Godzilla El Niño?

Seasonal (Lead 0.5 Months) Precipitation Heidke Skill Score
DJF Manual Forecasts From 1995 to 2024





S2S Forecasting

Improving Subseasonal to Seasonal Precipitation
Forecasting For Water Management

S2Sforecasting.org

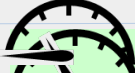
Looking Ahead

- Summer: heat risk, wildfire risk
- Fall/Winter: stronger El Niño winters associated with coastal erosion risk and marine mammal impacts (results of warmer ocean conditions). (Forecasts of ENSO strength will be more reliable later in the year.)

Julie Ekstrom, CA Department of Water Resources – Water Justice Office

ACCOMPLISHMENTS RELATED TO THE DRIP COLLABORATIVE 2024/25 RECOMMENDATIONS AND DISCUSSIONS

Tracking the 2024 DRIP Collaborative Recommendations

Focus Area	Recommendation	Progress
DROUGHT RELEVANT DATA	1. Drought Indicators and Metrics	 UCD project expanded , NIDIS SoCal pilot continued ; DRIP Collaborative workshop series launched
	2. Rapid Inventory of Drought-Related Tools and Resources	 ICARP Climate Services is documenting drought related tools and data; VCP guidance.
DROUGHT PREPAREDNESS FOR DOMESTIC WELLS	3. Empowering County Drought Resilience Planning for DW* and SSWS**	 County assistance funding near complete : monthly webinars pivoting to county needs/interests
	4. Voluntary Community-Based Well Monitoring Program	 DWR-supported pilot program launched and expanded through regional offices.
	5. Roles & Responsibilities	 DRIP Collaborative workshop series launched .
DEFINITION & NARRATIVE	6. Drought Definitions and Case Studies	 LCI including case studies of community drought experiences, as part of State's Fifth Climate Change Assessment. Soliciting input.

Recommendation **Highlight:** Voluntary Community-Based Well Monitoring Program

Progress: Pilot program **launched** and expanded through DWR's regional offices.

Led by: Water Justice Office (Zoe Kanavas) and Sustainable GW Management Office (Bryce Russell)

Pilot! What is the **Community Groundwater Monitoring Program?**

- Voluntary DWR program supporting **domestic well owners, schools, and small water systems**
→ Offers training, equipment, and support
- Monitor groundwater *levels* - **not use**
- Builds **community knowledge** and statewide monitoring coverage
- Flexible to meet **local needs** and **interest**



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Status to date:

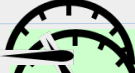
- **17 domestic well owners**
- **25 NTNC schools** (across the state)
- **40 small systems** (most in Central Valley)

Partnering with:

- DWR Regional Offices
- Sonoma **LEVEL UP!** 
Voluntary Well Monitoring Program
- Self-Help Enterprises



Tracking the 2024 DRIP Collaborative Recommendations

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	4. Voluntary Community-Based Well Monitoring Program	 DWR-supported pilot program launched and expanded through regional offices.
	5. Roles & Responsibilities	 DRIP Collaborative workshop series launched April 1st .
DEFINITION & NARRATIVE	6. Drought Definitions and Case Studies	 LCI including case studies of community drought experiences, as part of State's Fifth Climate Change Assessment. Soliciting input.

Tracking the 2025 DRIP Collaborative Recommendations

Focus Area	Recommendation	Progress
ECOSYSTEMS	1. Instream Flows: Best Practices for Landowner Cooperative Solutions	 No reported update.
	2. Housing Needs in Reflection of Capacity of Water Supply and Wastewater Infrastructure	 UCLA Luskin Center for Innovation – Masters project ongoing
LAND USE PLANNING-WATER NEXUS	3. Alignment Assessment and Guidance of Housing and Water Planning	 No reported update; early discussions LCI-DWR.
	A. Integrate Water into Land Use Planning	 LCI developing optional water element in its General Plan Guidance Update.
COMPLEMENTARY EFFORT	B. Guidance to Integrate/Align Drought Planning	 No reported progress.



New progress identified



Early progress identified



No progress to report to date

DRIP Collaborative Discussion

What additional activities and initiatives are being implemented to

- Advance the 2024/25 recommendations
- Planning for drought and water shortage response

Public Comment

Tracking the 2024 and 2025 DRIP Collaborative Recommendations

1. In-person participants

2. Virtual participants:

- a) Raise your hand with the “Raise Hand” feature in Zoom and you will be asked to unmute and speak.
- b) Send a Zoom chat to the webinar manager if you need technical assistance.
- c) If you are dialing in by phone, dial *9 to raise your hand and dial *6 when it you are called on to speak.

ROLES AND RESPONSIBILITIES FOR DOMESTIC WELLS AND STATE SMALL WATER SYSTEMS

DARIO ALCANTRA

A well owner's perspective

Roles and Responsibilities

Problem Statement: When domestic wells (DW) and state small water systems (SSWS) fail to provide safe drinking water, due to impaired water supply or quality, it impacts **Californians' Human Right to Water**. California currently lacks a comprehensive approach to address the urgent drinking water needs of households served by **failing DW and SSWS** and lacks a comprehensive policy for reducing the growth of dry DW and SSWS in the future.



2024 DRIP Collaborative Recommendation: Analyze and clarify the roles and responsibilities of State, local, and other entities in managing and coordinating **risk management efforts** to address **water supply losses and water quality issues** affecting private wells and SSWS.

This analysis should include:

STEP I

- **Current Roles:** Assess existing responsibilities in managing domestic wells and SSWS across the drought-risk management cycle.
- **Identified Gaps:** Highlight inefficiencies in authority, funding, and coordination.

STEP II

- **Gap Prioritization:** Focus on addressing the most critical gaps affecting drought resilience.
- **Proposed Solutions:** Provide recommendations for funding mechanisms and long-term planning to mitigate risks.

KEY QUESTIONS TO EXPLORE THROUGHOUT THE PROCESS



VISION FOR THE FUTURE

UNDERSTANDING WHERE WE'RE AT

1. **Responsible Parties**- Who are the relevant responsible parties when considering programs/initiatives to support DW and SSWS?
2. **Existing Programs**- What are the current programs and initiatives that are relevant to supporting DW and SSWS?
3. **Experience and Capacity** - What can be learned from existing programs and initiatives about what works and what is missing? What expertise, funding, and institutional support are available?

GAP ANALYSIS

4. **Comparing Vision and Reality** - What overlaps, inefficiencies, or gaps exist in governance or accountability? What is working well and should be leveraged?
5. **Underlying Causes of Identified Gaps** - These may include policy or regulatory barriers, resource or funding limitations, institutional or communication breakdowns, and knowledge or data gaps.
6. **Prioritizing Gaps and Opportunities for improvements** - Which gaps are most critical to address first? What dependencies or linkages exist among them?

LOOKING AHEAD

7. **Opportunities for Progress** - What promising new initiatives, partnerships, or policy shifts could support progress?
8. **Barriers and Challenges** - What constraints or considerations must be addressed to advance these opportunities?

PUTTING IT ALL TOGETHER

9. **Proposed Next Steps** - How will new initiatives be evaluated to ensure progress toward the desired vision?

Roles and Responsibilities – Workshop #1

Participation: DRIP Collaborative members and invited participants included diverse perspectives

- State Agencies: California Department of Water Resources, State Water Board, California Farm Bureau
- Counties: El Dorado Water Agency, Mendocino County, Santa Cruz County, Los Angeles County, Ventura County, Sutter County
- Statewide Associations: California State Association of Counties, California Association of Mutual Water Companies
- GSA: Sacramento Central Groundwater Authority
- Community members
- NGOs/CBOs: Rural Community Assistance Corporation, Self-Help Enterprises, Community Water Center, Central California Environmental Justice Network, Cal Trout

Presentations: State, regional, and counties programs to support domestic wells and SSWS

Input provided:

- Revisiting the problem statement and framing a vision to address the R&R recommendation
- Building together an inventory of programs and considering an approach to help identify gaps and opportunities for improvements

Framing the Vision for Roles and Responsibilities



Proposed vision statement:

Ensure that **all households** relying on domestic wells and state small water systems in California have **consistent reliable access to safe and sufficient drinking and sanitation water**, supported by a **comprehensive and coordinated statewide approach** to prevent, identify, and respond to failing wells.

Human Right to Water: Every person in California has the right to safe, clean, affordable, and accessible water for drinking, cooking, and sanitation. The state must consider this right when making water policies and prioritize improving water access, especially for communities that lack reliable or safe drinking water.

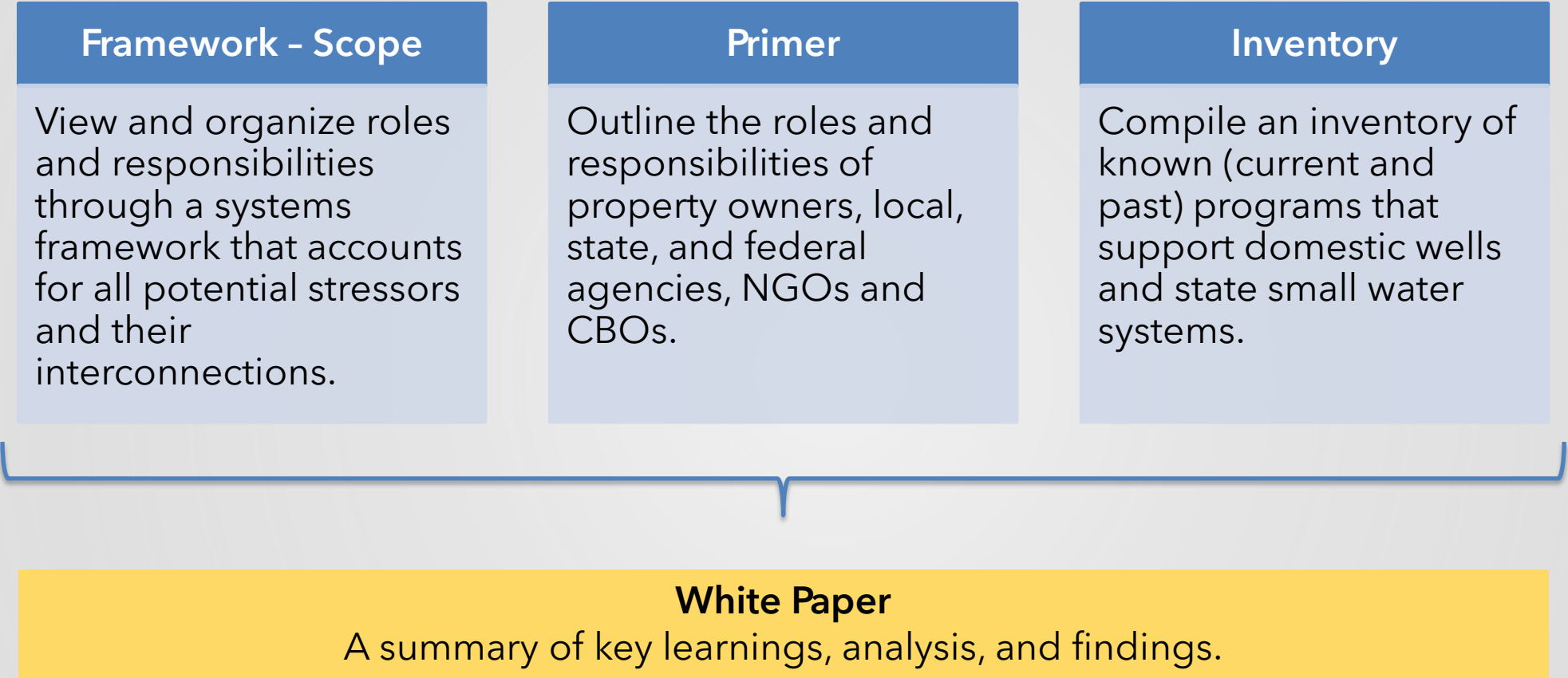
Driving factors that may lead to failing DW and SSWS:

- Mechanical - pump failure, old well
- Hydrology - drought conditions
- Geology - subsidence, fractured rock
- Water quality - contaminants, naturally occurring arsenic
- Demand - personal use, competing uses
- Natural disasters, particularly wildfires
- lack of education among well-owners - O&M issues

Note: Need to distinguish between emergencies and long-standing nonviable wells



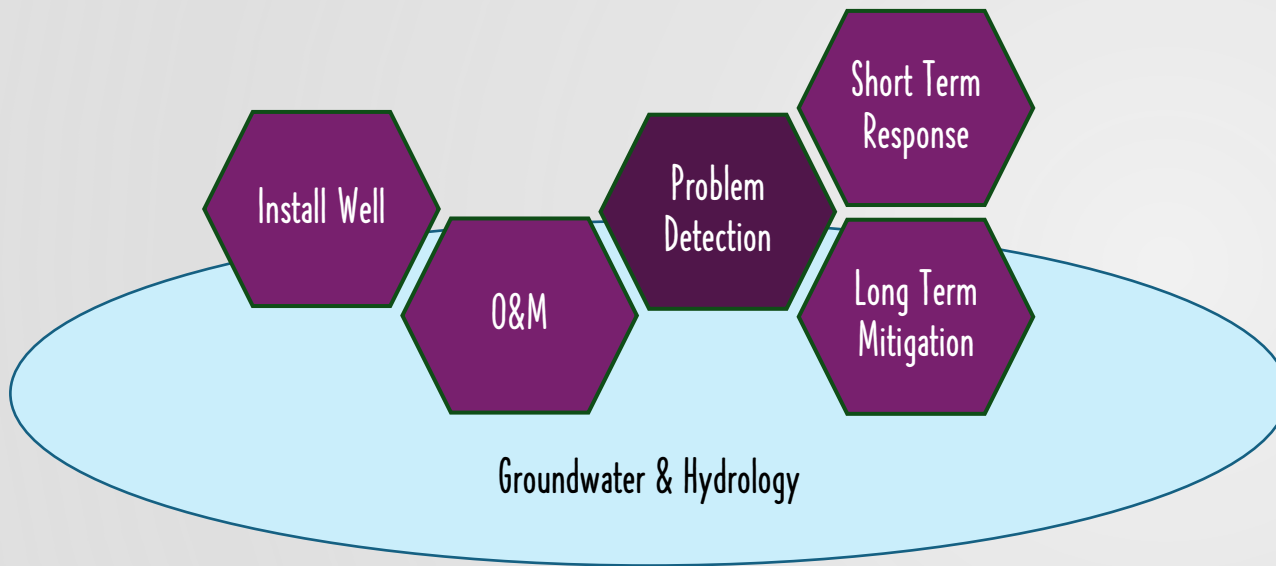
Roles and Responsibilities Workflow



Today we will explore the framework, **focus on the primer**, and highlight the inventory.

Part 1. Framework and Scope

Risk Management Cycle + Domestic Well Life Cycle



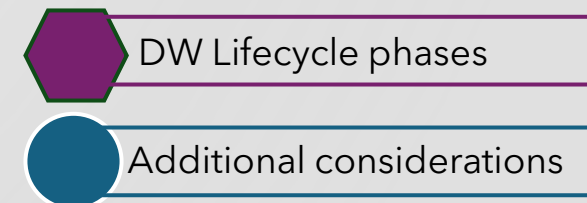
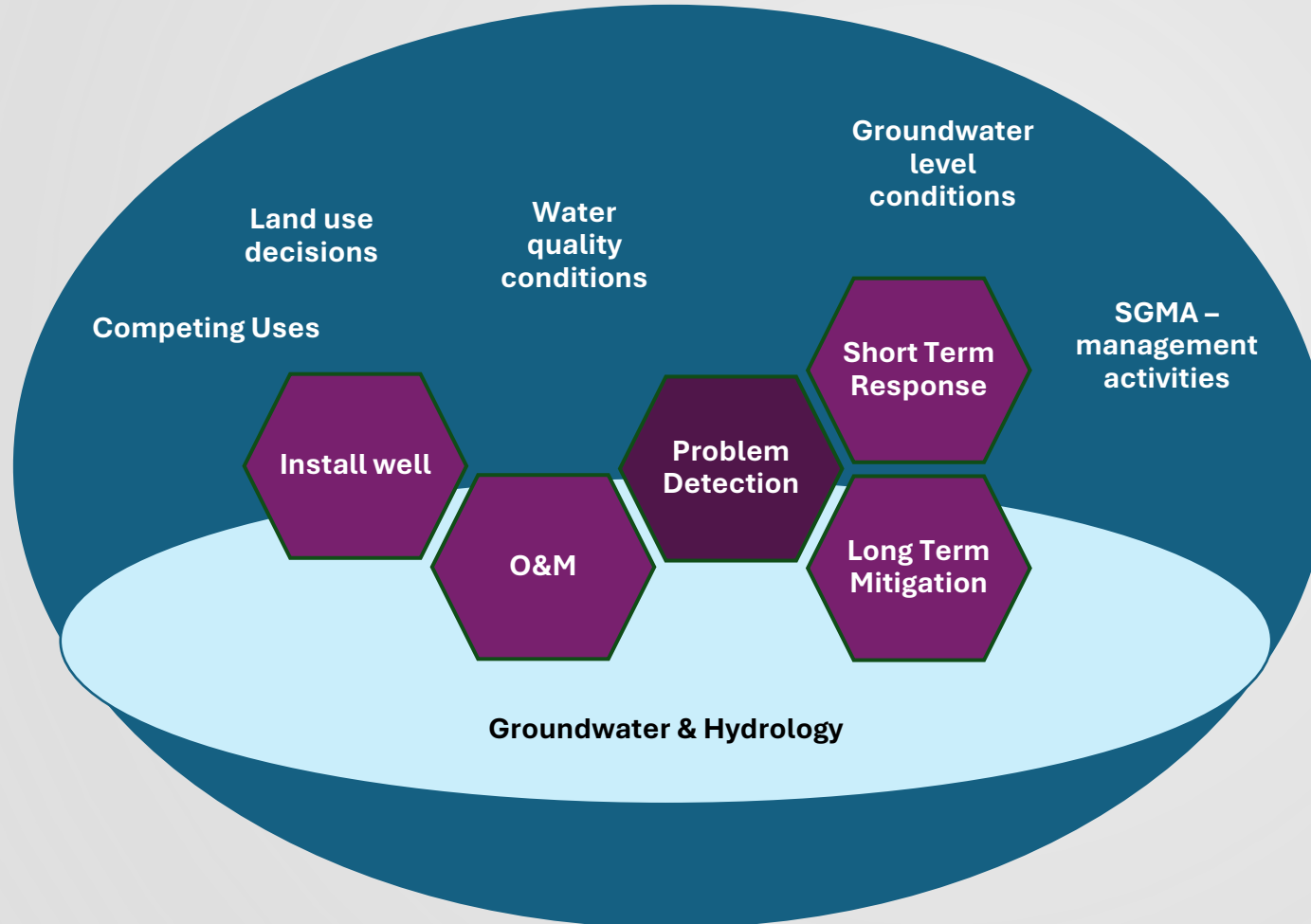
Workshop comments: *The current framework (DW lifecycle) focuses heavily on the well itself but doesn't fully capture the broader context of **how the well interacts with other water management practices**. To address this, the framework could be expanded to emphasize the well as a wider ecosystem.*

...and

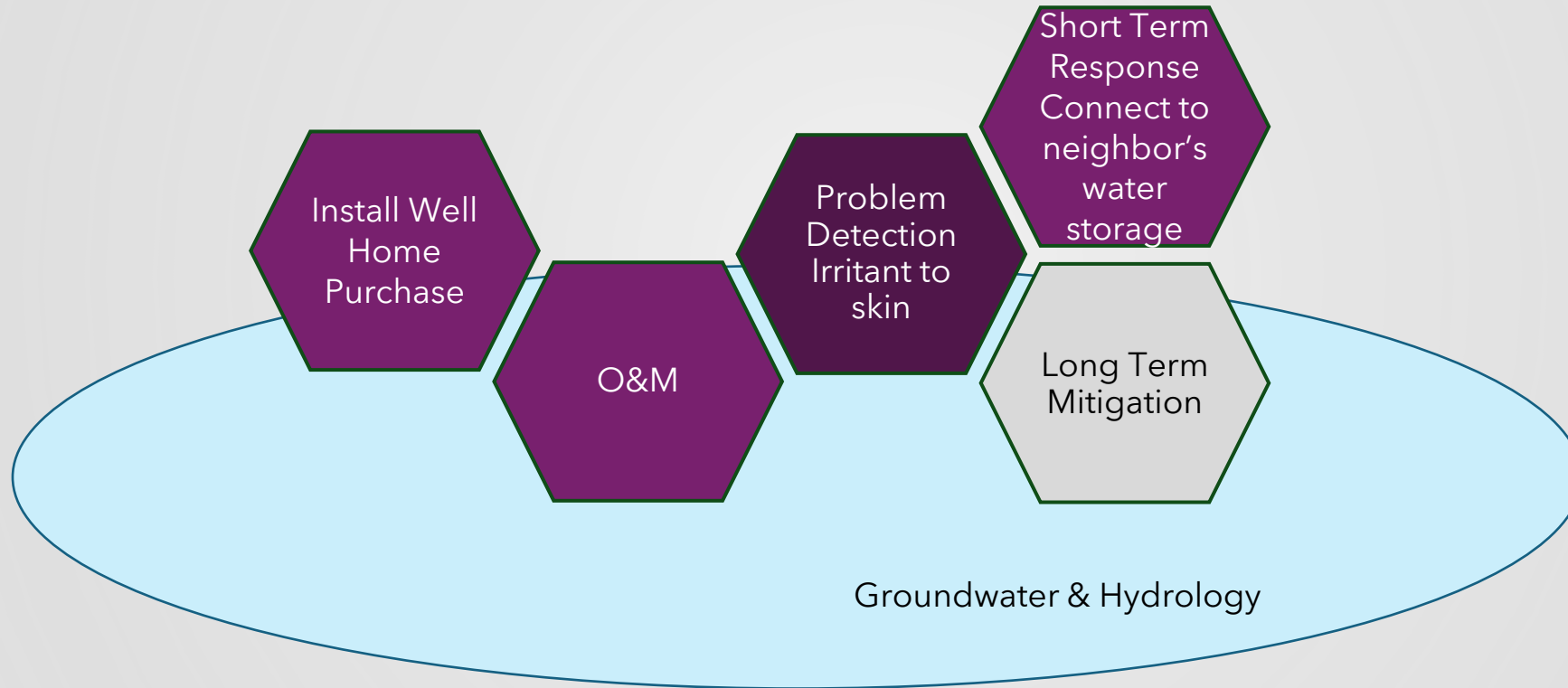
The well itself is a physical tool that can be managed through operations, maintenance, and monitoring. The well taps into a resource, groundwater, that is affected by broader management decisions.

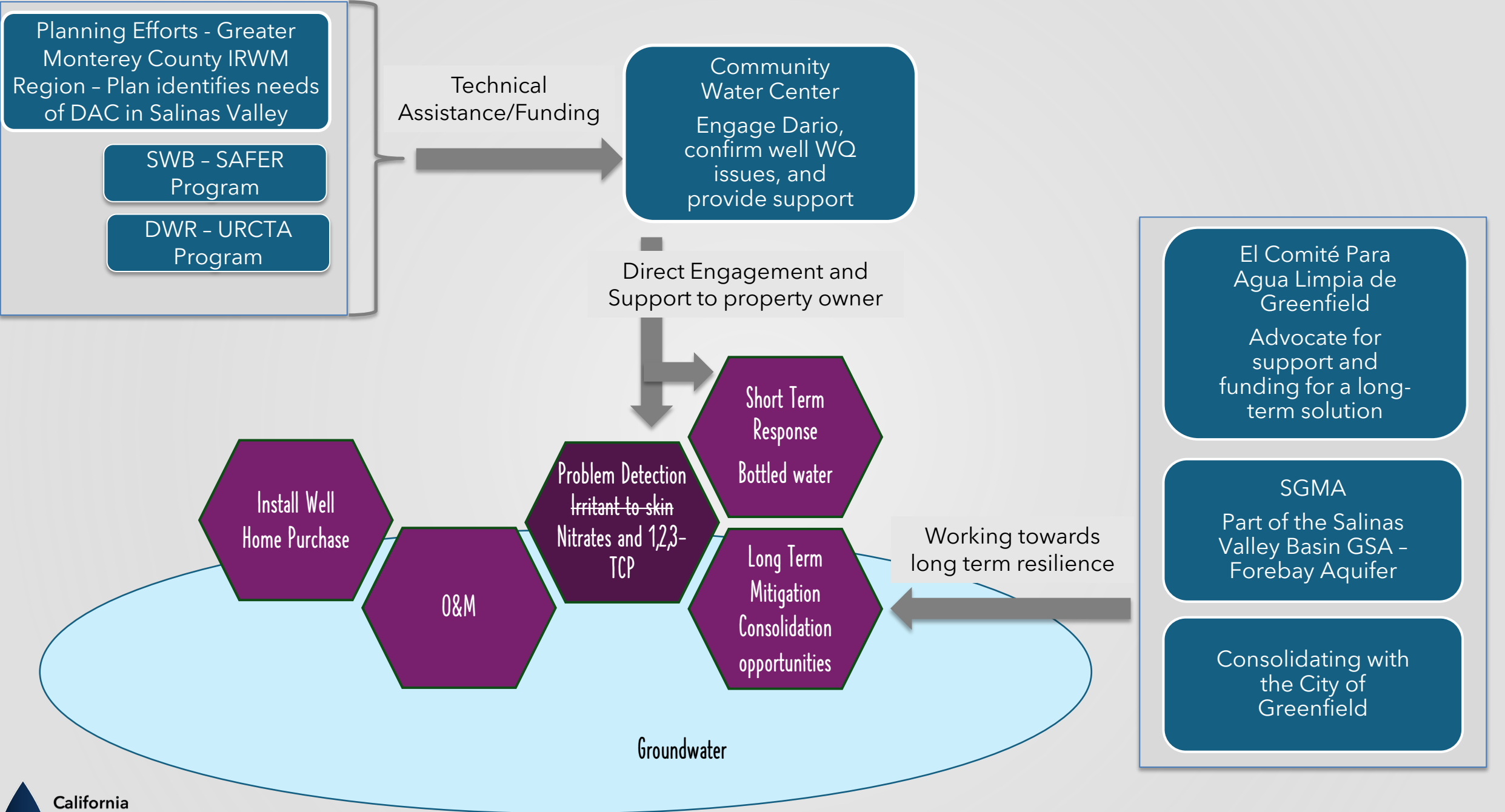
Part 1. Framework and Scope

Risk Management Cycle + Domestic Well Life Cycle + Additional Considerations



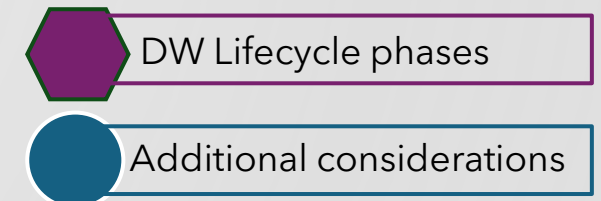
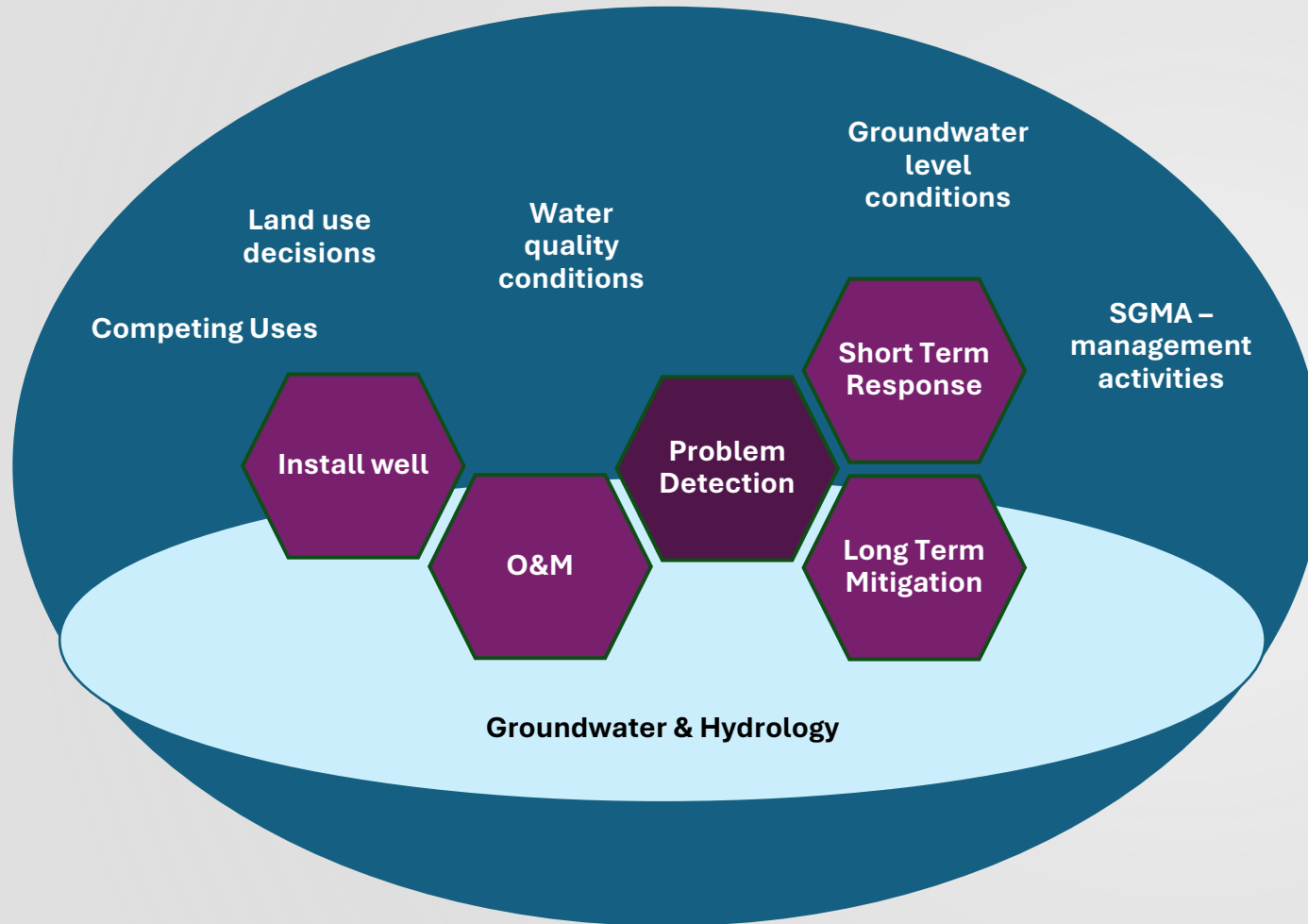
Revisiting Dario Alcantra's Experience





Part 1. Framework and Scope

Risk Management Cycle + Domestic Well Life Cycle + Additional Considerations



- What else needs to be considered in the framework?
- Which connections needs to be amplified?

Part 3. Compiling an Inventory of Programs

Counties -Response and Mitigation

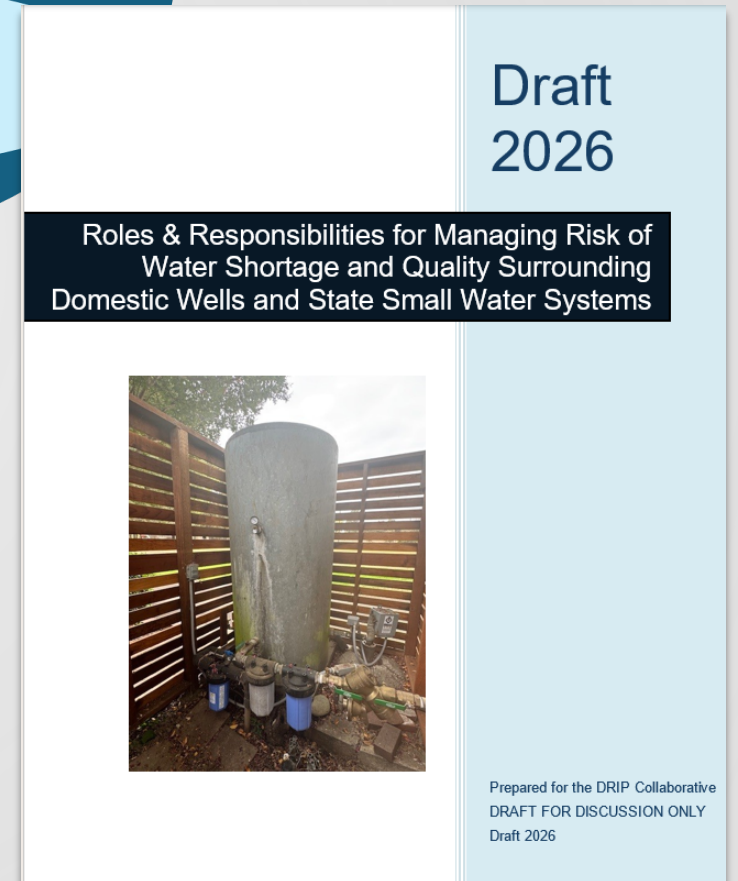
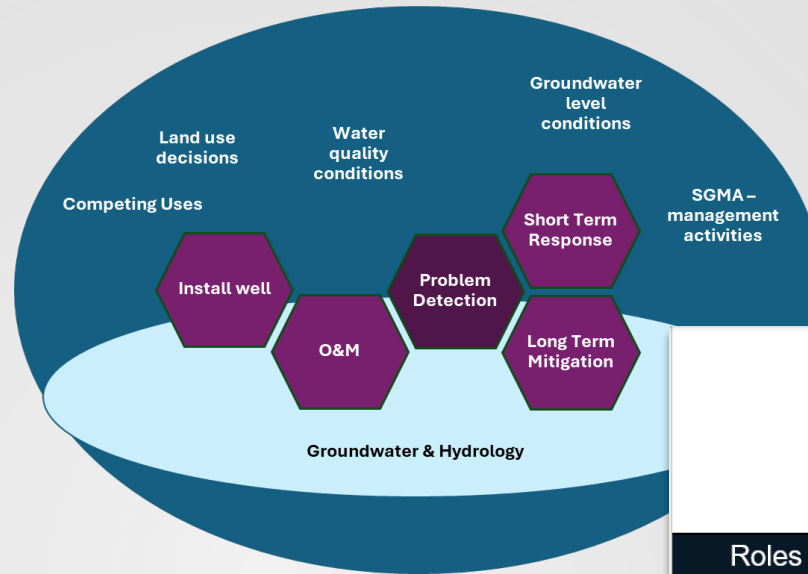
Program Name and Description	Coordination With others	Geographic Scope	Ongoing/ one-time/ past efforts	Key benefits to DW/SSWS
County Drought Resilience Plans	DWR	County specific	One time (Statute)	Short term and long-term planning for drought impacts
SB552 Drinking Water Well Mitigation Program	NGOs, SGMA, MJHMP	County specific	-	Differ by county
Bottled Water Pre-Negotiated Contracts	NGOs, SGMA	County specific	In response to drought conditions/ emergency declaration	Emergency water supplies
Voluntary Water Conservation Program	NGOs, DWR, SGMA	County specific	-	Outreach/Information



Part 2. DRAFT Primer on Roles and Responsibilities

Sections (aligned with framework)

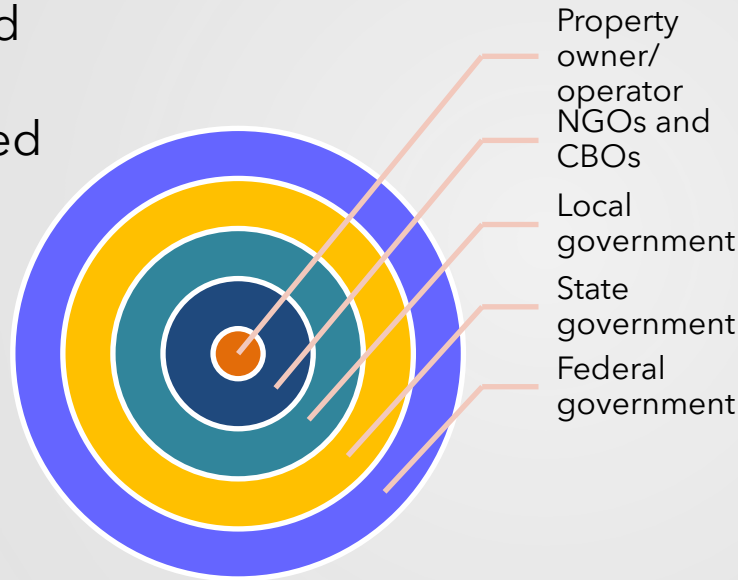
1. Install Well
2. Operate and Maintain
3. Problem Detection
4. Short Term Interim Response
5. Long Term Mitigation Strategies
6. Hydrology
7. Land Use Decisions
8. SGMA
9. Water Quality Conditions



Part 2. DRAFT Primer on Roles and Responsibilities

Each Section includes

- Overview
- By entity – specific roles and responsibilities for
 - Property owner/licensed driller
 - State Small Operator
 - NGOs and CBOs
 - Groundwater Sustainable Agency
 - Local Agency
 - State Government
 - (Federal Government)



Lifecycle Phase

PROBLEM DETECTION

OVERVIEW

Detecting problems early, whether a declining water table, a failed pump, or a newly emerging contaminant, is the difference between a manageable maintenance issue and a full-blown water supply emergency. For **domestic wells**, detection depends almost entirely on the owner or occupant noticing something is wrong, because there is no required monitoring and no external oversight, with the exception of AB 2454 (2024). **State small water systems** have mandatory monitoring for certain contaminants, but detection of supply problems and many water quality issues still depends on the operator's attention and resources. Drought makes detection more urgent and more difficult: it accelerates groundwater depletion, concentrates naturally occurring contaminants like arsenic, and can shift the chemistry of a well that tested fine for years. Regional early warning for both comes from the State Water Board, Department of Water Resources, and Groundwater Sustainability Agencies, which track basin-wide water quality and declining groundwater levels. However, this data usually informs agency response rather than reaching individual owners and operators directly.

BY ENTITY

Property Owner / Occupant (Domestic Well)

- First line of detection in nearly all cases
- No required monitoring, so detection is often reactive (well runs dry or water quality changes noticeably)
- Responsible for initiating testing if contamination is suspected
- Under AB 2454 (2024), rental property owners must participate in testing programs if located in area identified by SWRCB as at risk for unsafe drinking water

Operator (SSWS)

- Has a greater detection obligation due to county-required monitoring schedules
- Must track water quality results and report exceedances to SWRCB (clarify*)
- More likely to detect slow-developing contamination proactively versus a domestic well owner

CBOs and NGOs

- Where present, can serve as a first point of contact for residents who don't know who to call or distrust government agencies
- Can act as an informal detection network, identifying patterns of dry wells or water quality complaints before they reach agencies
- Connect residents to free or subsidized testing programs they may be unaware of
- Bridge language and cultural barriers that cause problems to go unreported
- Aggregate community-level complaints, creating early warning signals that can prompt agency attention
- Escalate issues to county or state agencies on behalf of residents who lack capacity to self-report

Local Agency (Typically County Environmental Health)

- **Receives** reports from owners/operators
- May conduct inspections that reveal problems
- Maintains records that can reveal patterns across a region
- **SSWS**: Can mandate additional monitoring if water quality risk is suspected

This draft primer is part of a series covering roles and responsibilities related to domestic wells and state small water systems (4–15 service connections) in the context of drought impacts and water quality challenges. State small water systems are distinct from public water systems and operate under a different, lighter regulatory framework.

5

This draft primer is part of a series covering roles and responsibilities related to domestic wells and state small water systems (4–15 service connections) in the context of drought impacts and water quality challenges. State small water systems are distinct from public water systems and operate under a different, lighter regulatory framework.

2

R&R Primer – Small Group Discussion

Small Group Discussion: 30 minutes – following up on workshop discussions

Overall Process: Each group is invited to review one of three components of the Primer

1. Install Well
2. Operate and Maintain

← Primarily property owner responsibility

3. Problem Detection

GROUP 1

4. Short Term Interim Response
5. Long Term Mitigation Strategies

GROUP 2

6. Hydrology
7. Land Use Decisions
8. SGMA
9. Water Quality Conditions

GROUP 3

R&R Primer – Small Group Discussion

[30 min] Each group is invited to review their section of the Primer and address the following questions:

1. **ROLES AND RESPONSIBILITIES:** Does the Overview description accurately reflect the core roles and responsibilities of the various agencies?
2. **COORDINATION:** We heard at the workshop: *A comprehensive and coordinated statewide approach is essential, but it needs to be aligned with the local government role, particularly counties, which have a key presence in unserved areas. Counties can help organize and empower local property owners, providing a more localized approach to well management and support.* What are the opportunities to strengthen coordination and collaboration among agencies?
3. **PUBLIC AWARENESS:** We heard at the workshop: *Many community members are not aware of existing programs, tools, or resources—even when outreach efforts have taken place.* -- What strategies or approaches could improve awareness, accessibility, and use of available programs?

Report Out: Share key learnings from your discussion.

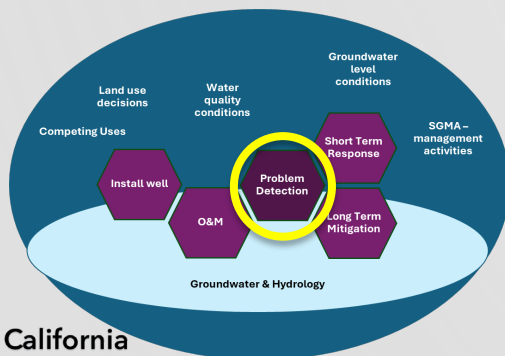
We will collect notes to inform further development and future discussions

Breakout Assignments

For the different Primer sections, consider: Roles and responsibilities, Coordination needs and opportunities, and building public awareness

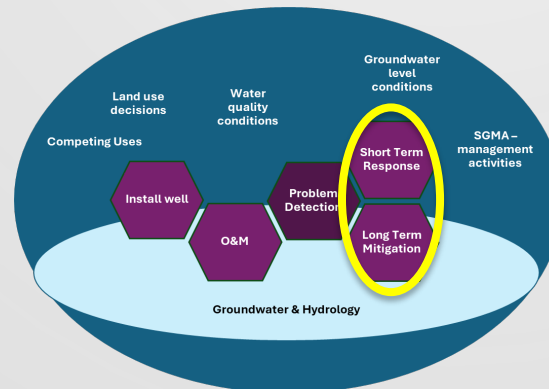
Group 1. Problem Detection (Zoe and Glen)

- Alexandra Biering
- Alvar Escrivá-Bou
- Karen Mogus
- Katy Landau
- Mike Myatt
- Samantha Arthur
- Virginia Jameson



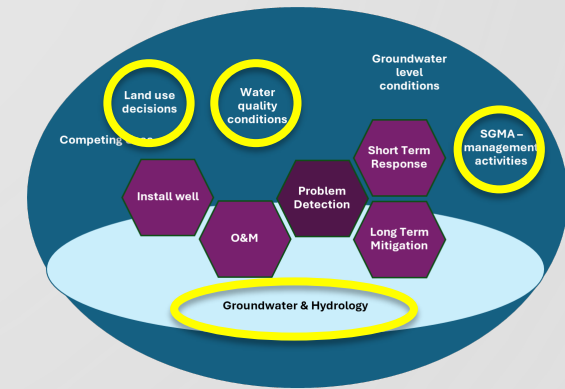
Group 2. Response & Mitigation (Julie)

- Andrew Altevogt
- Chelsea Haines
- Joshua Cahill
- Maria Gallegos Herrera
- Mariko Falke
- Rhett Anderson
- Sierra Ryan



Group 3. External Considerations (Orit and Anthony)

- Carolina Hernandez
- Charles Delgado
- Joaquin Esquivel
- Laura Ramos
- Nate Ortiz
- Paul Gosselin
- Suzanne Pecci
- Tim Worley





Roles and Responsibilities - Discussion

General Impressions from the Primer Review

- What stood out to you most?
- Where do you see strengths, gaps, or overlaps?

Responding to specific questions

1. **ROLES AND RESPONSIBILITIES**: Does the Overview description accurately reflect the core roles and responsibilities of the various agencies?
2. **COORDINATION**: What are the opportunities to strengthen coordination and collaboration among agencies?
3. **PUBLIC AWARENESS**: What strategies or approaches could improve awareness, accessibility, and use of available programs?

Next R&R Workshop: Tentatively scheduled for Thursday, May 28th 10AM - 12PM.

Public Comment

Roles and Responsibilities

1. In-person participants

2. Virtual participants:

- a) Raise your hand with the “Raise Hand” feature in Zoom and you will be asked to unmute and speak.
- b) Send a Zoom chat to the webinar manager if you need technical assistance.
- c) If you are dialing in by phone, dial *9 to raise your hand and dial *6 when it you are called on to speak.

LUNCH BREAK!

PLEASE RETURN AT:

1:25pm

(so we can start promptly at 1:30pm)

DRIP Collaborative (Quorum is 14)

1. **Alexandra Biering**, California Farm Bureau
2. **Katy Landau**, California Environmental Protection Agency
3. **Alvar Escriva-Bou**, University of California, Davis
4. **Mike Wyatt (for Anna Schiller)**, Environmental Defense Fund
5. **Brent Hastey**, Plumas Lake Self Storage, Owner
6. **Charles Delgado**, California State Association of Counties
7. **Carolina Hernandez**, Los Angeles County Public Works
8. **Chelsea Haines**, Association of California Water Agencies
9. **Joshua Cahill**, Yurok Tribe
10. **Karen Mogus (for Joaquin Esquivel)**, State Water Resources Control Board
11. **Laura Ramos**, California Water Institute at Fresno State
12. **Maria Gallegos Herrera**, Rural Community Assistance Corporation (RCAC)
13. **Mariko Falke**, California Department of Water Resources - Tribal Affairs Office
14. **Nate Ortiz (for Christina Curry)**, California Office of Emergency Services

15. **Paul Gosselin**, California Department of Water Resources
16. **Samantha Arthur**, California Natural Resources Agency
17. **Sierra Ryan**, Santa Cruz County
18. **Suzanne Pecci**, Domestic Well Advisory Group, South American Subbasin
19. **Rhett Anderson (for Tami McVay)**, Self Help Enterprises
20. **Tim Worley**, California Association of Mutual Water Companies
21. **Virginia Jameson**, California Department of Food and Agriculture

Additional Members:

22. **Emily Rooney**, Agricultural Council of California
23. **Nataly Escobedo Garcia**, Leadership Counsel for Justice & Accountability (alternate for Community Water Center) - *attending virtually*
24. **Emiko Burchill**, California Department of Fish and Wildlife
25. **Natalie Kuffel**, Governor's Office of Land use and Climate Innovation
26. **Redgie Collins**, California Trout Inc.

DROUGHT INDICATORS & METRICS

Drought Indicator & Metrics

Problem Statement: As California faces a hotter, drier future, **the absence of clearly defined, actionable drought metrics and indicators** poses a significant challenge to prioritize **drought actions** effectively and understand their **full impacts**. To ensure adaptive and localized strategies through all phases of the water lifecycle, it is crucial to bridge data gaps, ensure data accessibility and interoperability, and support modeling for climate-ready decision making across the state.



2024 DRIP Collaborative Recommendation: Develop a practical drought early warning system to improve information to inform local and state drought management actions and increase overall drought resilience.

This analysis should include:

- **Implementation Considerations:** Need to develop a partnership between state agencies and other interested parties, possibly via steering workgroup and advisory committee. Conduct research activities and set-up hosting/maintenance.
- **Equity Considerations:** Address limited resources and data to small communities, domestic well owners, tribal nations, and those most vulnerable to droughts.
- **Alignment with Other Initiatives:** Ensure complementarity and value add with other existing efforts, including SB 552 (Water Shortage Vulnerability Tool), SAFER, NIDIS, US Drought Monitor and CWDC (Consortium) efforts.

DRIP White Paper Development Process 2026

PREPLANNING

- Identify individuals, organizations, and information resources to support topic development.
- Develop a draft vision and white paper outline to guide workshops discussions.

I. VISION FOR THE FUTURE

- Define the desired end state and the key questions to be addressed in the white paper.

Framing the Vision - Key Questions to Explore - White Paper Scope and Outline

II. UNDERSTANDING WHERE WE'RE AT

Establish a shared understanding of the current situation, experience, and capacity.

Current Conditions - Experience and Capacity

III. GAP ANALYSIS

Identify discrepancies between the current situation and the desired future vision.

Comparing Vision and Reality - Underlying Causes of Identified Gaps - Prioritizing Gaps

IV. LOOKING AHEAD

Identify practical pathways to move from current conditions toward the desired vision.

Opportunities for Progress - Barriers and Challenges - Proposed Next Steps

V. PUTTING IT ALL TOGETHER

Draft the white paper to document discussions, findings, and suggested next steps.

DI&M WHITE PAPER: KEY QUESTIONS TO ANSWER



- 1. Vision.** What is the appropriate DI&M vision for California?
- 2. Current Conditions (and Audience).** What is the current landscape of drought tools and portals? Who are the various intended end users and what are their needs?
- 3. Inventory.** What are the existing indicators? Can we create a master inventory list of indicators, identify key gaps, and plan out the path forward to ensure sufficient (spatial / temporal) coverage?
- 4. Datasets.** What datasets are needed to achieve those indicators? Which ones exist already? What additional data needs to be gathered?
- 5. Roadmap.** What defines success in 1 year (immediate)? 3 years (short-term)? Next 5 years (medium-term)?
- 6. Funding/Resources.** What type of investment is needed to achieve the roadmap? What types of resources and expertise is needed?
- 7. Organizations and Hosting.** What organizations need to be involved? Who should lead the effort? Who will play what role in hosting and being authoritative sources for indicators? Will there always be many tools/efforts?

Framing the Vision for Drought Indicator & Metrics

Proposed vision statement:

All California **audiences** have access to the **current, historical, and upcoming risks and impacts** of drought. This includes knowledge at a **sector-specific level** via a Drought Early Warning System (**DEWS**), that can help inform what **actions** are required to most effectively achieve drought resilience.

Needs to start with **audiences**, to ensure we're "user centric"



Agriculture/Farmers



Water Agencies



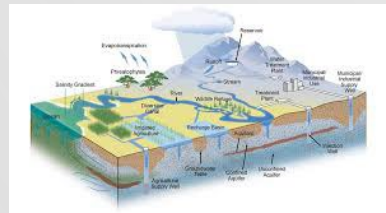
Cities



Tribal/Vulnerable Communities



State Agencies



Academics/Researchers



Counties

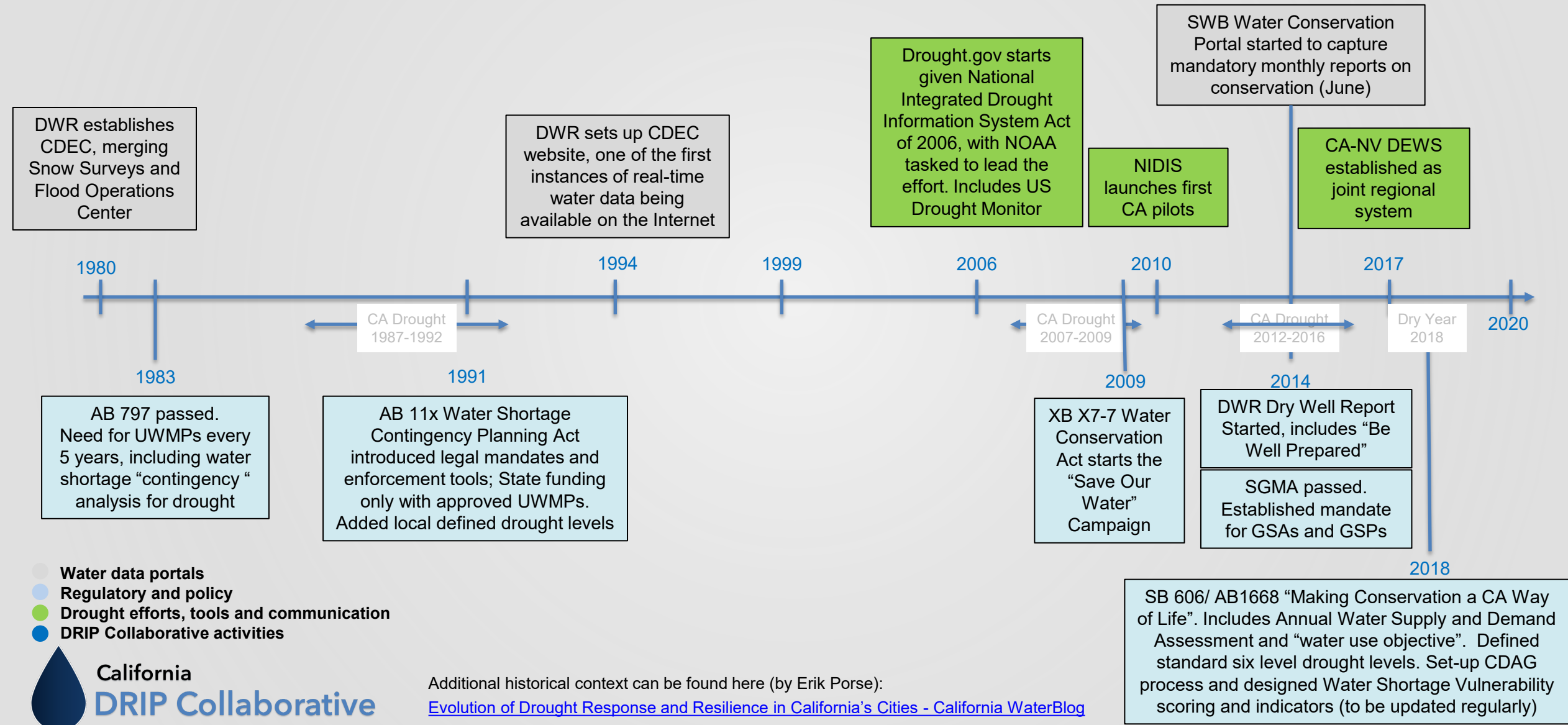


NGOs/Environment

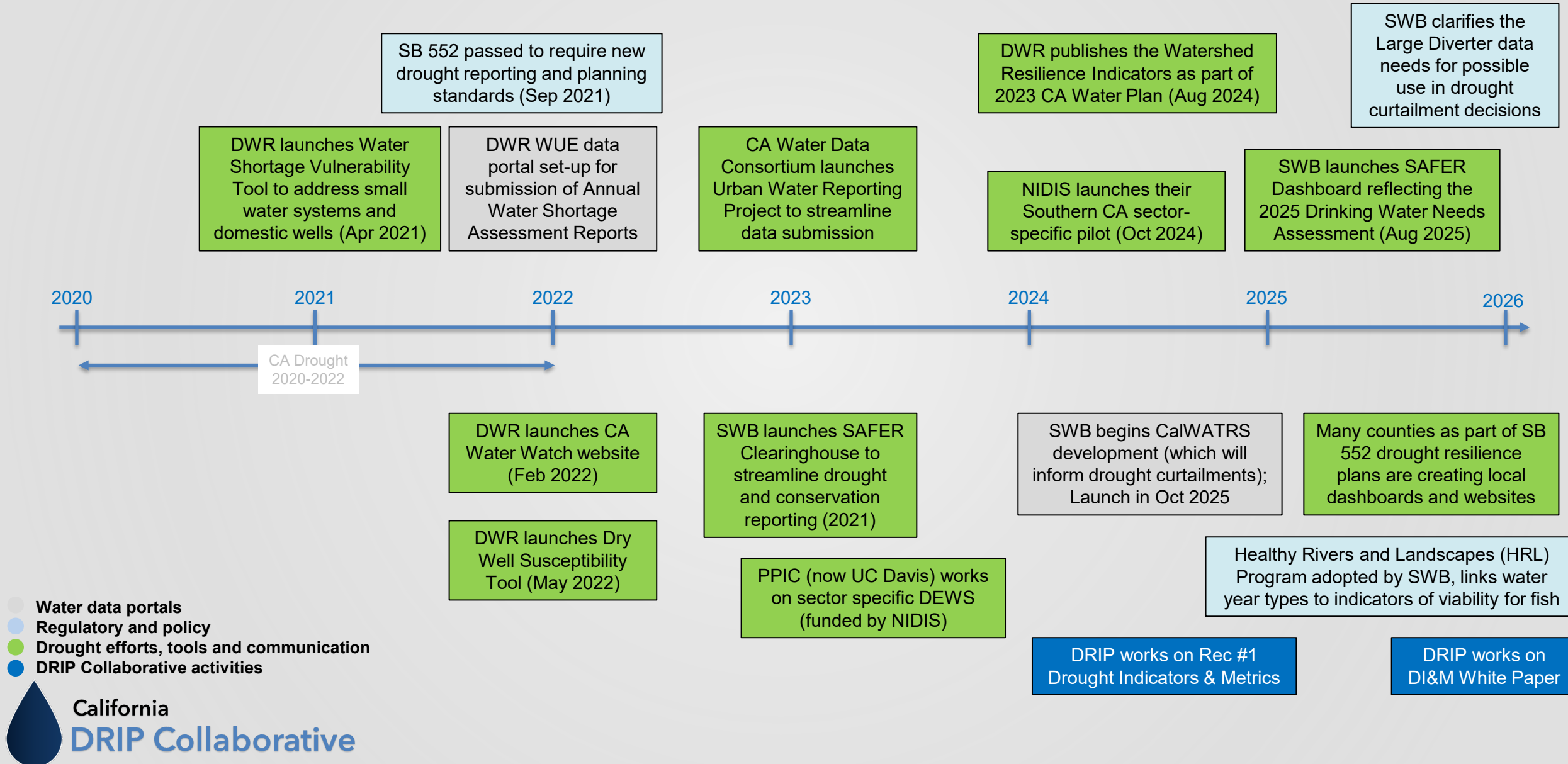


Media

DI&M: HISTORICAL CONTEXT 1980-2020 (1 OF 2)

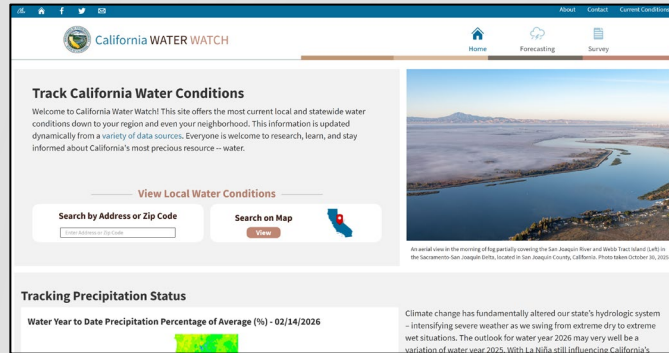


DI&M: HISTORICAL CONTEXT 2020-2025 (2OF2)



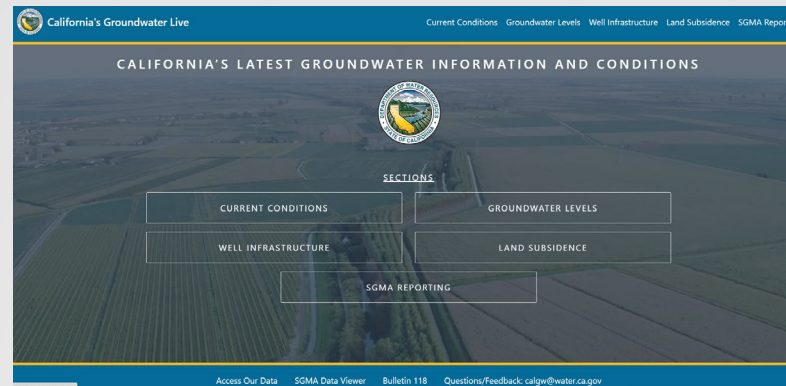
KEY WEBSITES FOR DROUGHT COMMUNICATION

California Water Watch



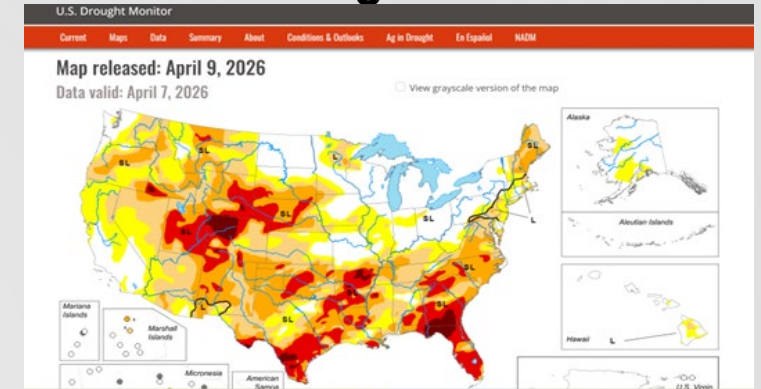
<https://cww.water.ca.gov/>

CA Groundwater Live



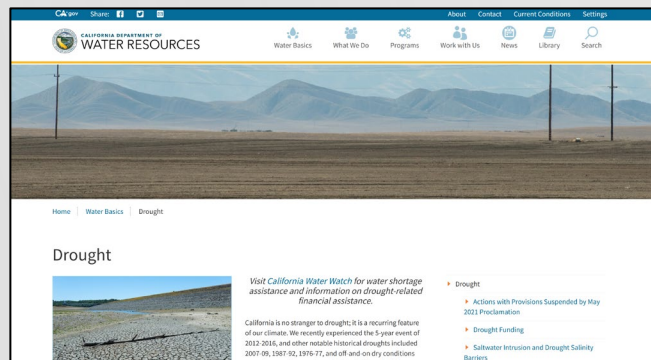
<https://calgwlive.water.ca.gov/>

US Drought Monitor



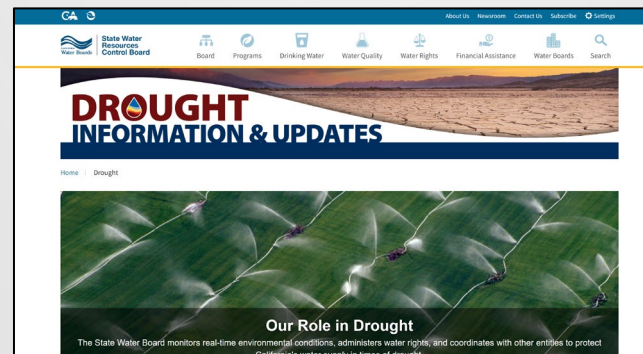
<https://droughtmonitor.unl.edu/>

DWR Drought Homepage



<https://water.ca.gov/drought>

SWB Drought Homepage



<https://www.waterboards.ca.gov/drought/>

Drought.gov



<https://www.drought.gov/>

Drought Indicator & Metrics – April 1st Workshop #1

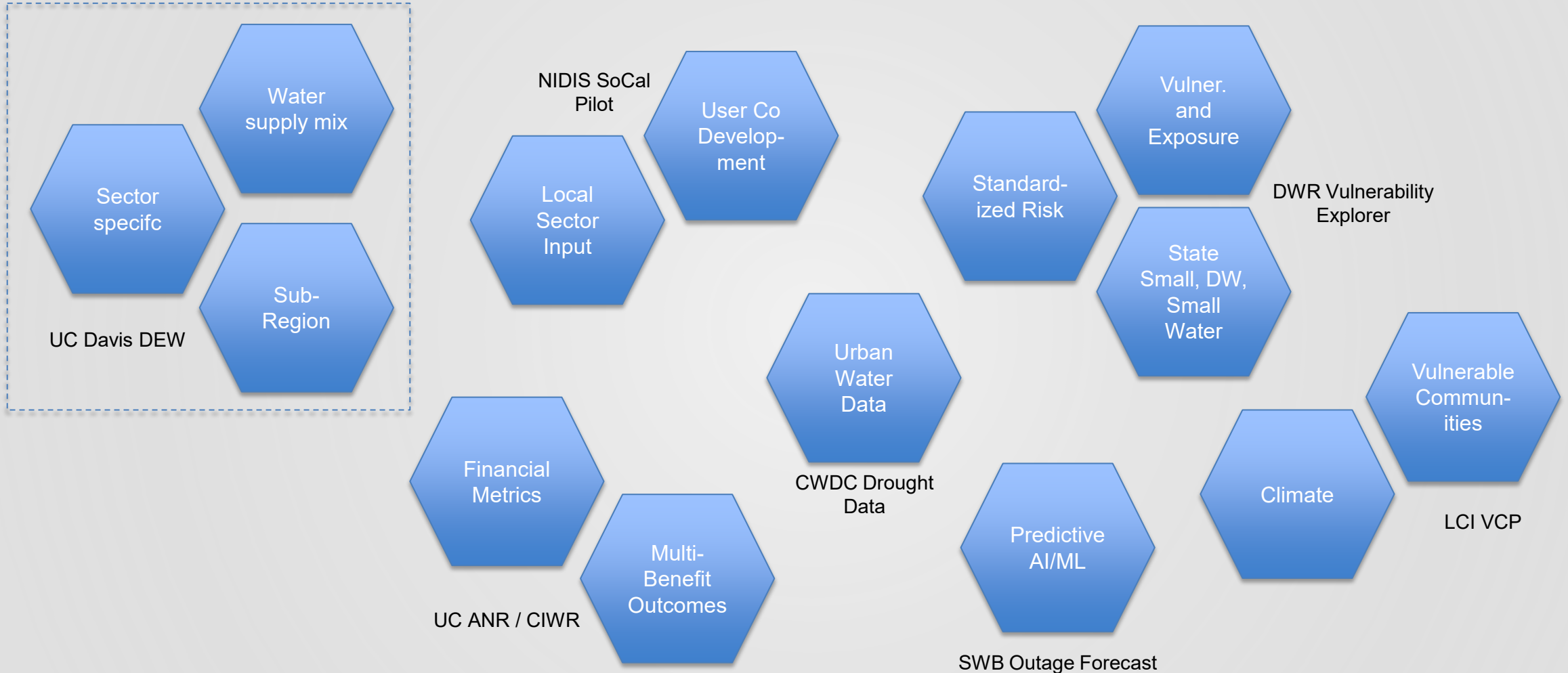
Participation: DRIP Collaborative members and 30+ participants included diverse perspectives

- Agencies: Department of Water Resources, State Water Board, Governor's Office LCI, CDPH, EPA
- Academics/Researchers: UC Davis, NOAA NIDIS, CA Water Data Consortium

Project	Presenter	Description	Audience
UC Davis Drought Early Warning	Alvar	Project to establish a CA centric, higher resolution drought early warning system and dashboard	State/regional/local Researchers
NOAA NIDIS SoCal Pilot	Amanda/Andy	Pilot to modernize DEW by improving sector specific response and move to proactive	Local health officials, farmers, water utilities
CWDC Drought Data	Robyn	Project making drought data more accessible, especially those from urban water agencies	Water data stakeholders, including water agencies
UC ANR / CIWR	Erik P	Research to assess drought response and impacts, including financial effect on water utility finances	State/regional/local Researchers
CA Water Watch & DWR Water Shortage Vulnerability Explorer	Julie	Tools to communicate key info, assess risk of small water systems, DWs, and state smalls	Small Water Systems, DWs, State Small WS, Counties
SWB Outage Forecast Predictor	Eric Z	Program to forecast community water system outages using drought indices	Div of Drinking Water, CalOES, Water System staff
LCI Drought and VCP	Ben	Effort to use drought indices in climate work and Vulnerable Communities Platform	VCP: NGOs, locals, and policy makers

Drought Indicator & Metrics – April 1st Workshop #1

Biggest Takeaway: Complementary innovations highlighted by the seven presentations

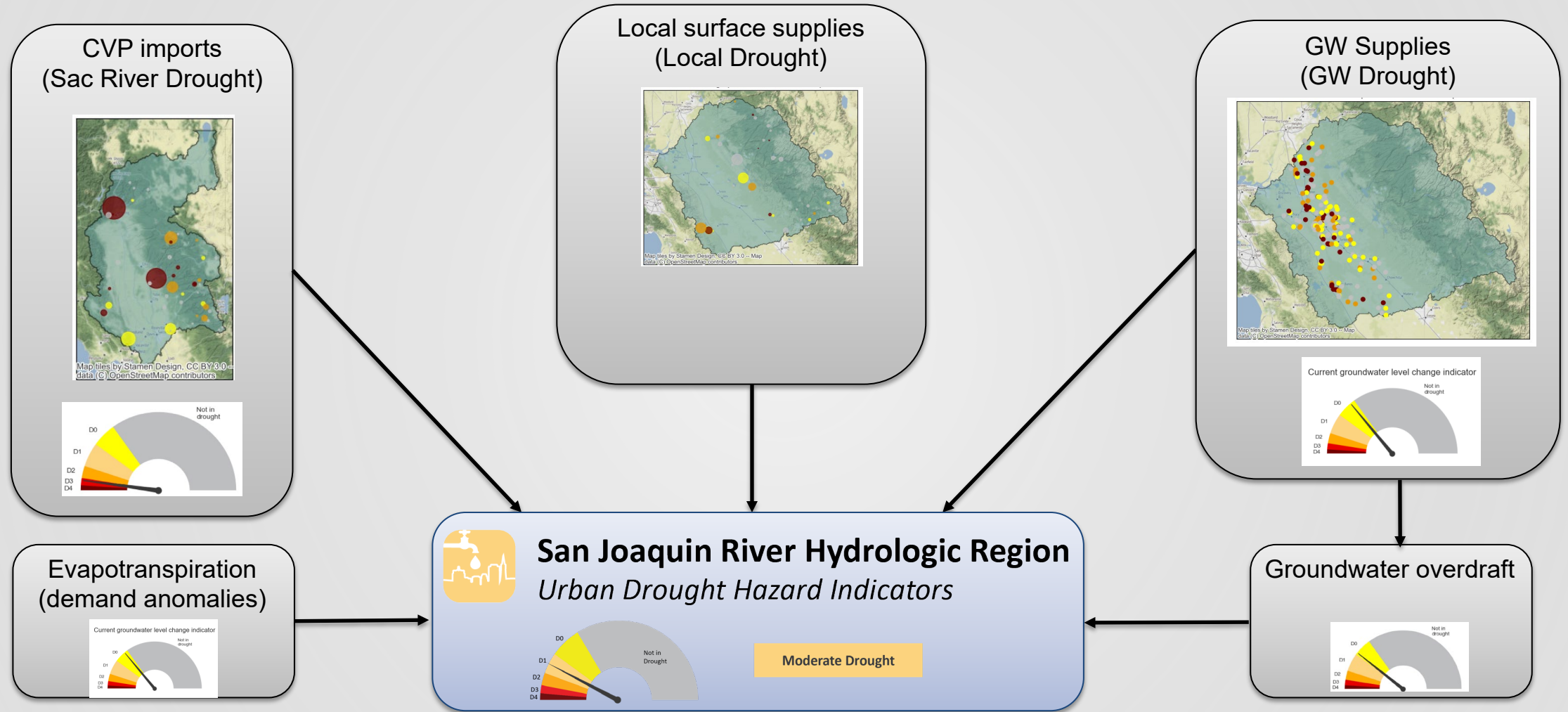


So many possible combinations!

More impact metrics? Use of AI/ML, user/sector engagement?

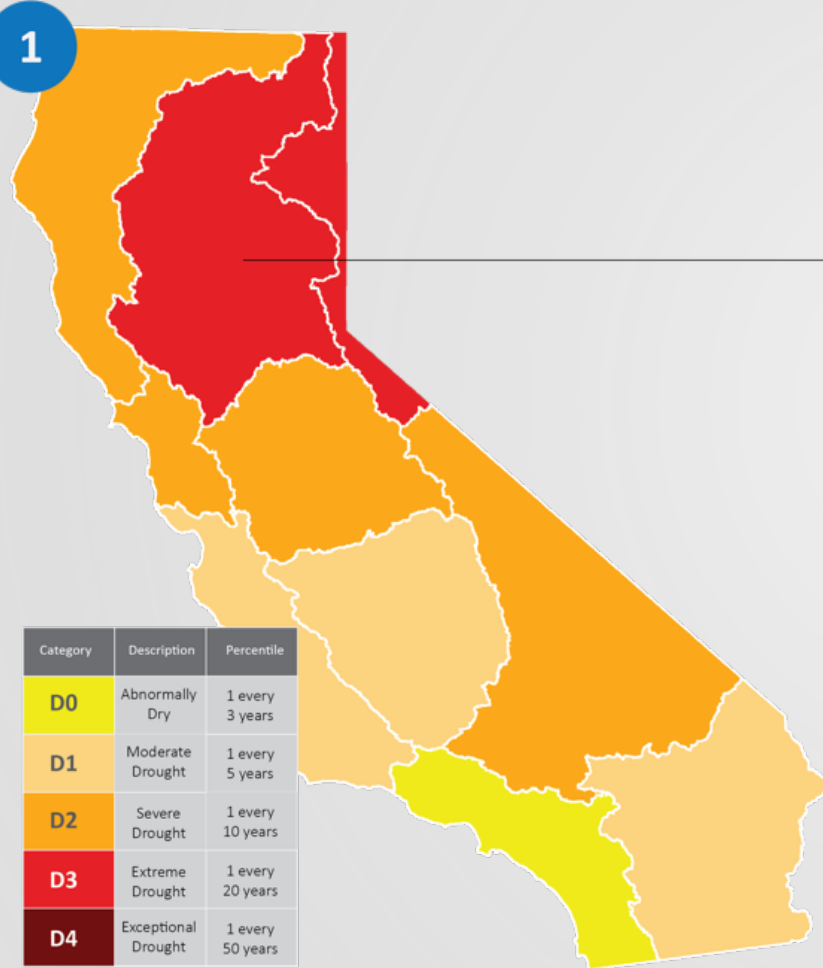
Predictive, climate, at various spatial/temporal scales?

Drought Indices for users with complex supply portfolios

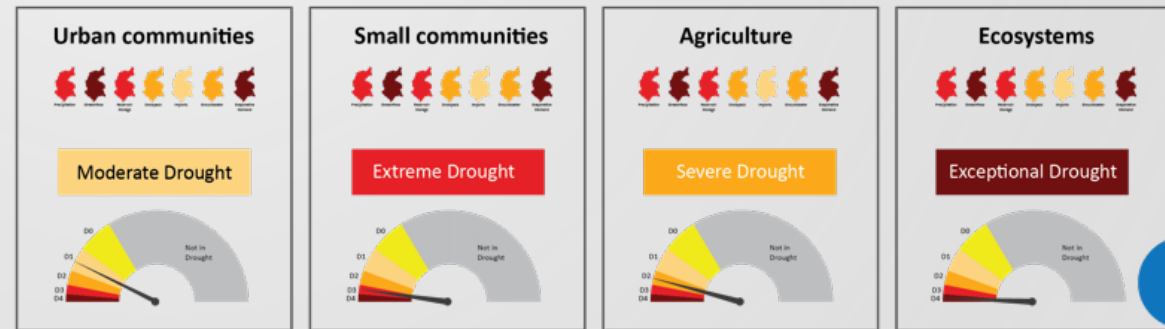
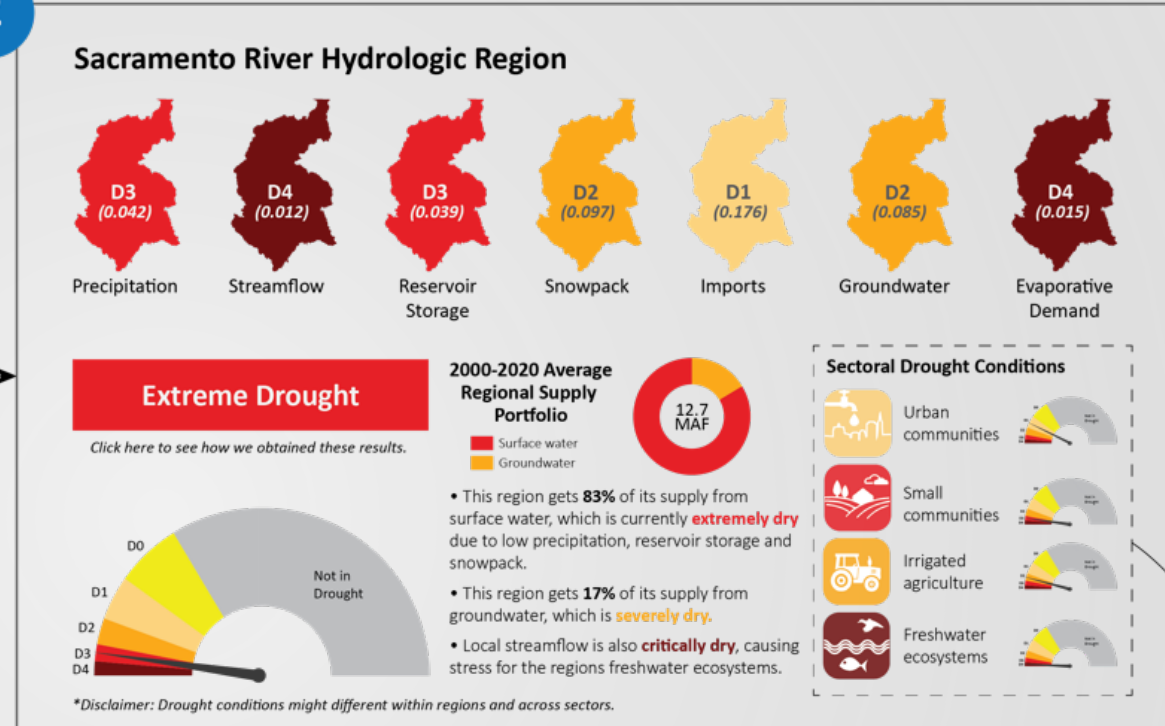


Developing a Sector-Specific DEW Dashboard for CA

Grid-informed Regional Drought Hazard Index



2



Alvar's Next Steps

- Start Drought Early Warning Dashboard:
 - Convene sectoral advisory groups to respond to data needs for meaningful actions
 - Complete drought hazard, exposure and vulnerability methodologies at finer scales
 - Develop useful dashboard
- Develop quasi-real time monitor of drought hazard and drought impacts
 - Pilot project in San Joaquin River

DI&M – April 1st Workshop #1 Breakout Session

- Users and What They Need
 - Ensure user centric. The needed drought info varies by audience. Actual needs assessment has been partially done for some users, but not all.
 - Confirm the most vulnerable are getting the message in an actionable way and time. Provide locally useful info most relevant to that user.
 - Address user concerns about triggers/thresholds. Some are afraid of what the State will do
 - Add predictive/forward looking, not just current risk.
 - Connect hazard indicators to impacts, including health, societal and economic/financial.
 - Ensure possible (dis)aggregation of data for each communication and sector insights. Provide easy access to underlying data used to create any summary or detailed score.
- Communication
 - Improve communication of indicators, especially via media (where many get their info).
 - Adopt a dashboard style communication interface, accessible by everyone down to the single well owner. Assume local outreach is likely needed.

Overall, the breakout sessions emphasized a shift toward more user-centric drought indicators that balance high-level communication with actionable, sector and local level response. All grounded in full impacts (not just on water availability), including human health, community, and economic outcomes.



Drought Indicator & Metrics - Discussion

Group Discussion (10min): Four Categories

- Are these categories useful for orienting our work related to the indicators?
- In assessing these four categories, does it align with how you are thinking about current indicators? How you might see potential gaps and opportunities?
- Note: We plan to use these four categories as a structuring framework for the DI&M White Paper

Breakout Groups (40 min + 20 min share results): Users

- We heard at the workshop: *We have to be really user centric. The information needed varies significantly based on the audience.* – We need to start with "what info" and "for what" unique to each user. This would inform a user-specific "needs assessment"?

KEY DROUGHT QUESTIONS (INDICATOR RELATED)

- | | | | |
|--|-----------------|---|------|
| 1. Are we in a <u>drought</u> ? How severe? What type? What sector? Where? When? | → Hazard | } | Risk |
| 2. Am I (or my <u>assets</u>) at risk? | → Exposure | | |
| 3. Level of <u>susceptibility</u> , given the broader situation (physical, institutional, economic)? | → Vulnerability | | |
| 4. At what <u>point</u> will action be taken? By whom? | → Thresholds | | |
| 5. What are the possible <u>actions</u> /response? | → Actions | | |
| 6. How <u>effective/efficient</u> was the response? | → Effectiveness | | |
| 7. What was (or will be) the <u>impact</u> (hydrologic, economic, societal, environmental)? | → Impacts | | |
| 8. What is the resulting drought <u>resilience</u> ? | → Resilience | | |

DI&M: SAMPLE INDICATORS (FOUR CATEGORIES)

Risk

Hazard Indicators

- US Drought Monitor, including DSCI
- Palmer Drought Severity Index (PDSI)
- Standardized Precipitation Index (SPI)
- Normalized Difference Vegetation Index (NDVI)
- Standardized Soil Moisture Index (SSI)

+many, many others...

Thresholds

SWP allocations

- Snow water equivalent (SWE) and reservoir levels
- Availability modeling that inform SW curtailments

County, NGO, Individuals

- GW levels and dry well reporting

Delta

- Saltwater intrusion

Water Agencies

- Water shortage contingency stages
- GSP minimum thresholds

Actions

State Agency

- # of Executive Orders and drought proclamations
- \$B in emergency drought response
- \$/well to restore access

Surface water

- # of curtailments
- % water deliveries (SWP, CWP, etc.)

Water systems

- % water conservation
- # of PWS consolidation orders

Impacts

Community

- # of dewatered wells
- # of people without sustainable access
- # of DACs affected

Agriculture

- % decrease in yields
- # of acres repurposed
- # of jobs lost
- \$ of lost ag revenue

Environment

- % decrease in fish species
- % change in subsidence
- Impact on forests, fires



Today's DI&M Breakout - Process

Overall Process: You will have 40 minutes in your breakout group. You'll be providing feedback on the user specific questions that need to be addressed by DI&M. Consider this initial input to the user specific "needs assessment" that we aim to create for the DI&M White Paper.

Discussion is highly encouraged and please try and reach some alignment in your group for each user!

After your breakout group is done discussing, we'll then reconvene as a Collaborative for 20 minutes to share results. Please have someone from your group ready to share.

Breakout Groups



“User Centric”. **What are your user specific drought questions (to inform via indicators)?**

Create a list of user specific questions that you think need to be answered via DI&M.

Use the lens of the group you represent as part of the DRIP Collaborative.

Each group also contains State Agency folks, who will be adding their views and listening.

**NGOs/Environment
Agriculture/Farmers
Academics/Researchers**

Group 1 – Julie/Zoe

- Mike Myatt
- Redgie Collins
- Alex Biering
- Alvar Escriva-Bou
- Laura Ramos
- Virginia Jameson
- Samantha Arthur
- Katy Landau

**Local/Counties
Comm Based Organizations
Tech Assistance Providers**

Group 2 - Glen

- Charles Delgado
- Sierra Ryan
- Tim Worley
- Nataly Garcia
- Rhett Anderson
- Maria Gallegos Herrera
- Karen Mogus
- Joaquin Esquivel

**Tribal
Public / Communities
Public Water Systems**

Group 3 – Orit/Anthony

- Suzanne Pecci
- Carolina Hernandez
- Chelsea Haines
- Mariko Falke
- Paul Gosselin
- Nate Ortiz
- Andrew Altevogt
- Joshua Cahill



Drought Indicator & Metrics - Discussion

General Impressions from the Breakout

- Does approaching DI&M from a "user centric" approach make sense?

Responding to specific questions

For each user/audience: What kind of questions or metrics did you come up with?

- Group 1: NGO/environment, ag/farmers, academics/researchers
- Group 2: Local/counties, community based organizations, TA providers
- Group 3: Tribal, public/communities, public water systems

Next DI&M Workshop: Tentatively scheduled for Friday, June 5, 2026. Morning

Public Comment

Drought Indicators and Metrics

1. In-person participants:

- a) Submit a comment card before or during the break.

2. Virtual participants:

- a) Raise your hand with the "Raise Hand" feature in Zoom and you will be asked to unmute and speak.
- b) Send a Zoom chat to the webinar manager if you need technical assistance.
- c) If you are dialing in by phone, dial *9 to raise your hand and dial *6 when it you are called on to speak.

SHORT BREAK

Joel Metzger, Deputy Director of Statewide Water Resources Planning and Enterprise Project Management,
Executive Branch, Department of Water Resources

WATER PLAN UPDATE

CALIFORNIA DEPARTMENT OF WATER RESOURCES

California Water Plan Update 2028

A New Era of Statewide Water Planning



Joel Metzger

Department of Water Resources

Deputy Director, Statewide Water Resources Planning

Purpose of Today's Presentation

- ☐ Provide an update on implementation of SB 72 and the California Water Plan 2028
- ☐ Discuss how the Water Plan can:
 - ☐ Inform drought indicators & metrics
 - ☐ Support domestic wells & small water systems
- ☐ Highlight opportunities for DRIP to shape development
- ☐ Preview next steps & engagement opportunities



1. Where We Are Now

2. What We Are Exploring

3. How We Move Forward



System Under Strain

California's Water System Built for the Past — Not Today's Risks

CLIMATE EXTREMES

- Increasing temperature, and declining snowpack
- More severe droughts, floods
- Intense atmospheric rivers

AGING INFRASTRUCTURE

- Stressed by drought and flood risks
- Disproportionately impacts disadvantaged communities

SHIFTING DEMAND

- Competing for shrinking, less reliable water supplies
- Water uncertainty threatens jobs and competitiveness

ECOSYSTEM PRESSURES

- Degraded rivers, wetlands, and fisheries
- Reduced biodiversity and climate resilience
- Post-wildfire impacts to water quality

Statewide water planning balances near-term modernization investments against the far greater long-term costs of inaction.



CALIFORNIA DEPARTMENT OF
WATER RESOURCES

SB 72: From Passage to Implementation

- Signed by Governor on October 1, 2025; **now enacted and in effect**
- Focus shifts from legislation to **implementation planning**
- Phased implementation began in **2026**
- Integration with **California Water Plan** beginning with Update 2028



SB 72: Broad, Statewide Support

- 200+ supporting organizations
- Unanimously passed Assembly, Senate
- Three Co-sponsors
 - California Municipal Utilities Association (CMUA)
 - California State Association of Counties (CSAC)
 - California Council for Environmental and Economic Balance (CCEEB)
- Support from:
 - Agriculture & environmental groups
 - Business & labor organizations
 - Counties, cities & regional chambers
 - Tribes & tribal organizations
 - Water agencies (municipal & agricultural)



CALIFORNIA DEPARTMENT OF
WATER RESOURCES





A New Era in California Water Planning

The California Department of Water Resources (DWR) is embarking on the 2028 California Water Plan, a multiyear effort to modernize statewide water planning and deliver a more action-oriented, measurable blueprint for long-term water reliability and resilience.

[Learn more](#)

SB 72: A Modernized California Water Plan

- **Establishes first-ever statewide water supply targets**
 - Water Plan 2028: Interim target of 9 million acre-feet by 2040
 - Water Plan 2033: New, watershed-based targets for 2050
- **Provides actionable direction**
 - moves the Water Plan from advisory guidance to a clear implementation framework
- **Expands coordination and consultation**
 - planning reflects statewide priorities and regional realities



How Much Water is 9 Million Acre Feet?

Equivalent to:

- $\approx 2 \times$ Shasta Reservoir, or
- $\approx 2.5 \times$ Lake Oroville, or
- $\approx 3.5 \times$ New Melones Reservoir

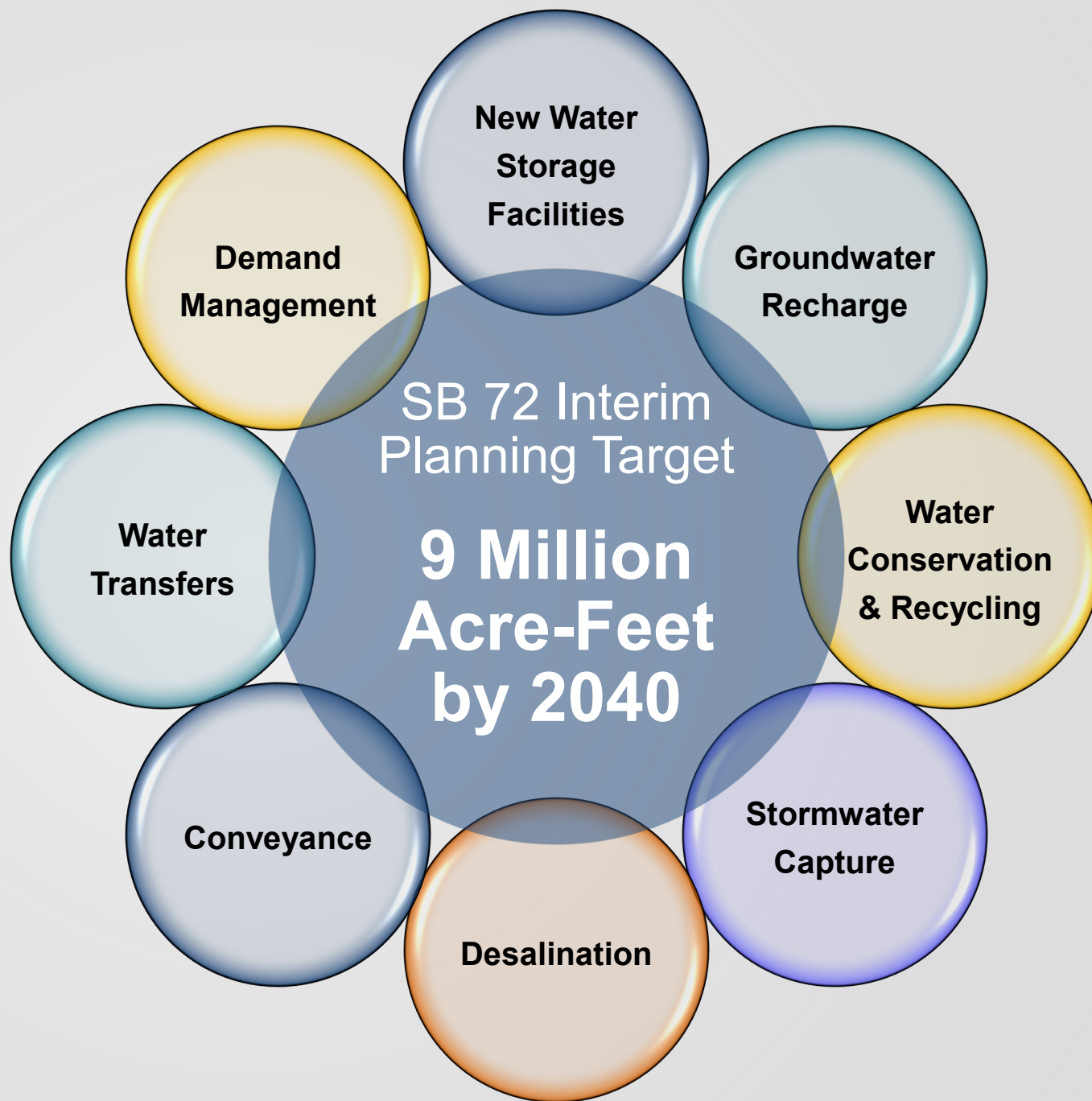
Enough water to serve:

- ~18 million households
- ~2.5 million acres of farmland for one year



SB 72: Planning Tools to Achieve the Interim Target

*Strategy categories
under the California
Water Plan*



CALIFORNIA DEPARTMENT OF
WATER RESOURCES

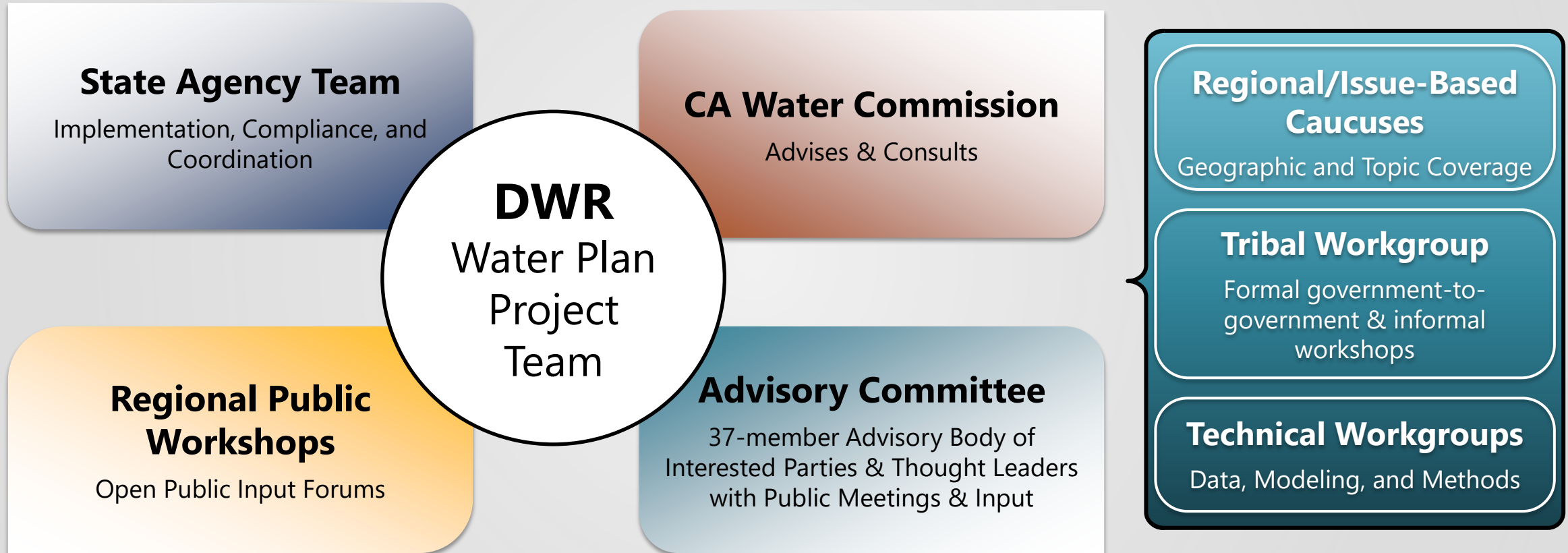
1. Where We Are Now

2. What We Are Exploring

3. How We Move Forward



Engagement and Coordination Architecture



State Agency Team & Federal Partners

Core State Agencies



Other State & Federal Agencies

- CalFire
- State conservancies
- Delta Stewardship Council
- USACE
- USBR
- NOAA
- USDA – Forest Service
- ... *others under consideration*



Opportunities to Engage

- Attend Advisory Committee Meetings
- Attend Regional Forums
- Join Caucuses
- Attend Water Commission Meetings
- Connect with the Technical Workgroup
- Go to CaliforniaWaterPlan.com and sign up for CWP Updates



1. Where We Are Now

2. What We Are Exploring

3. How We Move Forward



SB 72's Three Linked Workstreams

Data → Targets → Actions



DATA

Water Use & Supply Balances

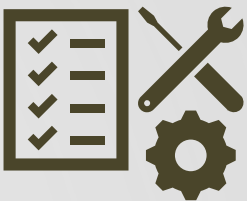
- Statewide, watershed-scale datasets
- Leverages new data and advanced technology
- Supports statewide planning models and activities



TARGETS

Long-Term Water Supply Targets

- Credible, local targets for urban, agriculture, Tribal, and environment
- Expanded coverage: 5 → 10 hydrologic regions
- Aligned with Governor's 2022 Water Supply Strategy and SGMA



ACTIONS

Adaptation & Implementation

- Place-specific strategies (including nature-based solutions) to close supply-demand gaps
- Cost-benefit analyses
- Progress tracking & integration across state, federal, and local planning



Next Steps

- **Ongoing:** Technical work
- **May 4:** Tribal Advisory Committee
- **April 30:** State Agency Team
- **May 13-14:** Advisory Committee meeting at Doubletree in Sacramento.
- **June:** Caucus formation, Regional Forum planning
- **July:** Technical Workgroup Meeting



Ideas for DRIP's Role in the Water Plan

- **Drought Indicators**
 - What metrics best reflect real-world impacts? What are we missing today?
- **Triggers for Action**
 - When should the state act? What thresholds matter locally?
- **Domestic Well & Small System Visibility**
 - Where are the biggest data gaps? What tools would improve response?
- **Implementation**



Thank You for the Opportunity to Speak



Joel.Metzger@water.ca.gov



CALIFORNIA DEPARTMENT OF
WATER RESOURCES

Public Comment

California Water Plan Update

1. In-person participants:

- a) Submit a comment card before or during the break.

2. Virtual participants:

- a) Raise your hand with the “Raise Hand” feature in Zoom and you will be asked to unmute and speak.
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Jessica Bean, PG, Assistant Deputy for Drought and Water Rights Modernization, Division of Water Rights,
State Water Resources Control Board

CALIFORNIA WATER RIGHTS

California Water Rights 101

Jessica Bean

Division of Water Rights

State Water Resources Control Board

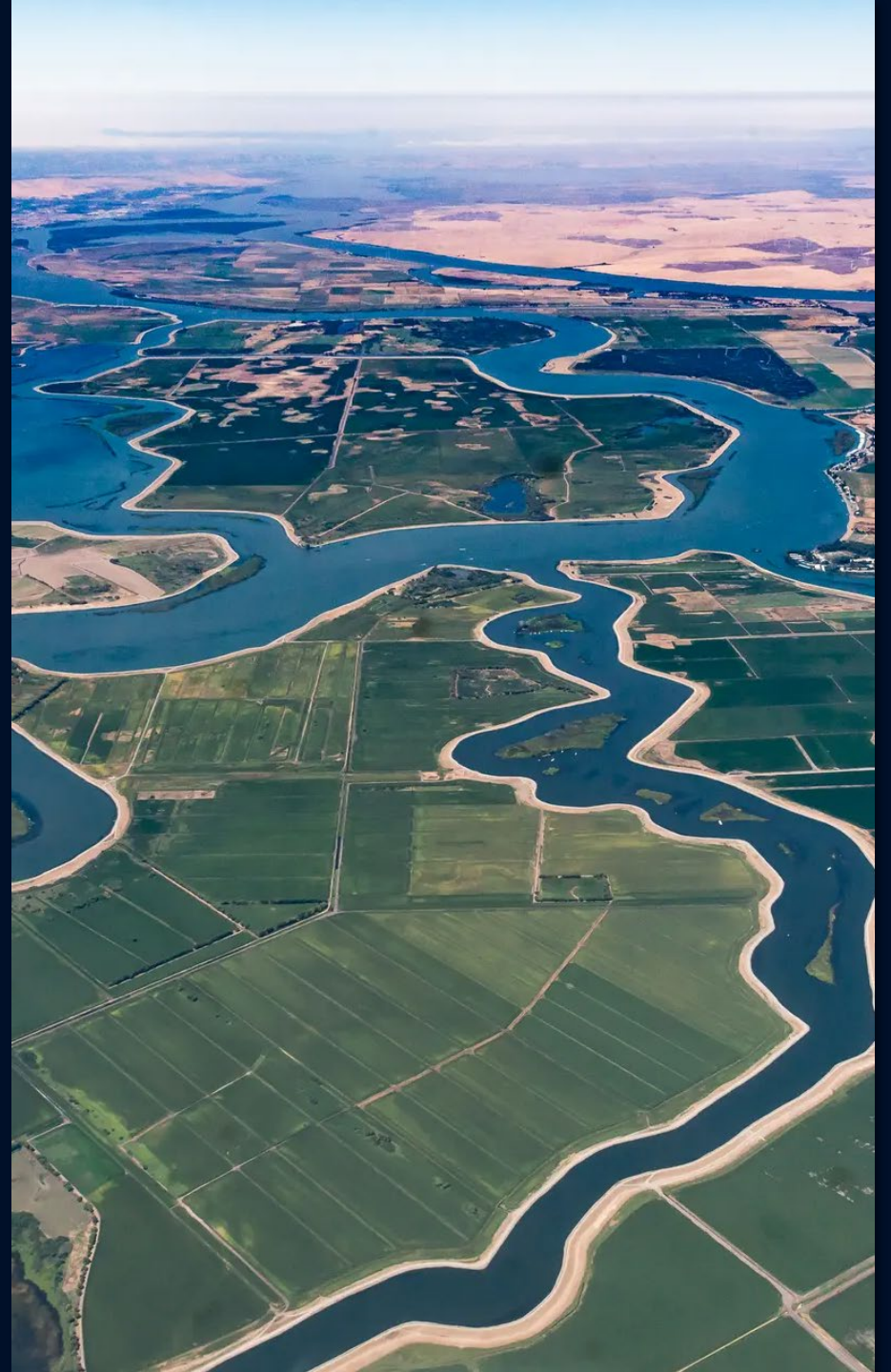


DRIP Collaborative | April 17, 2026

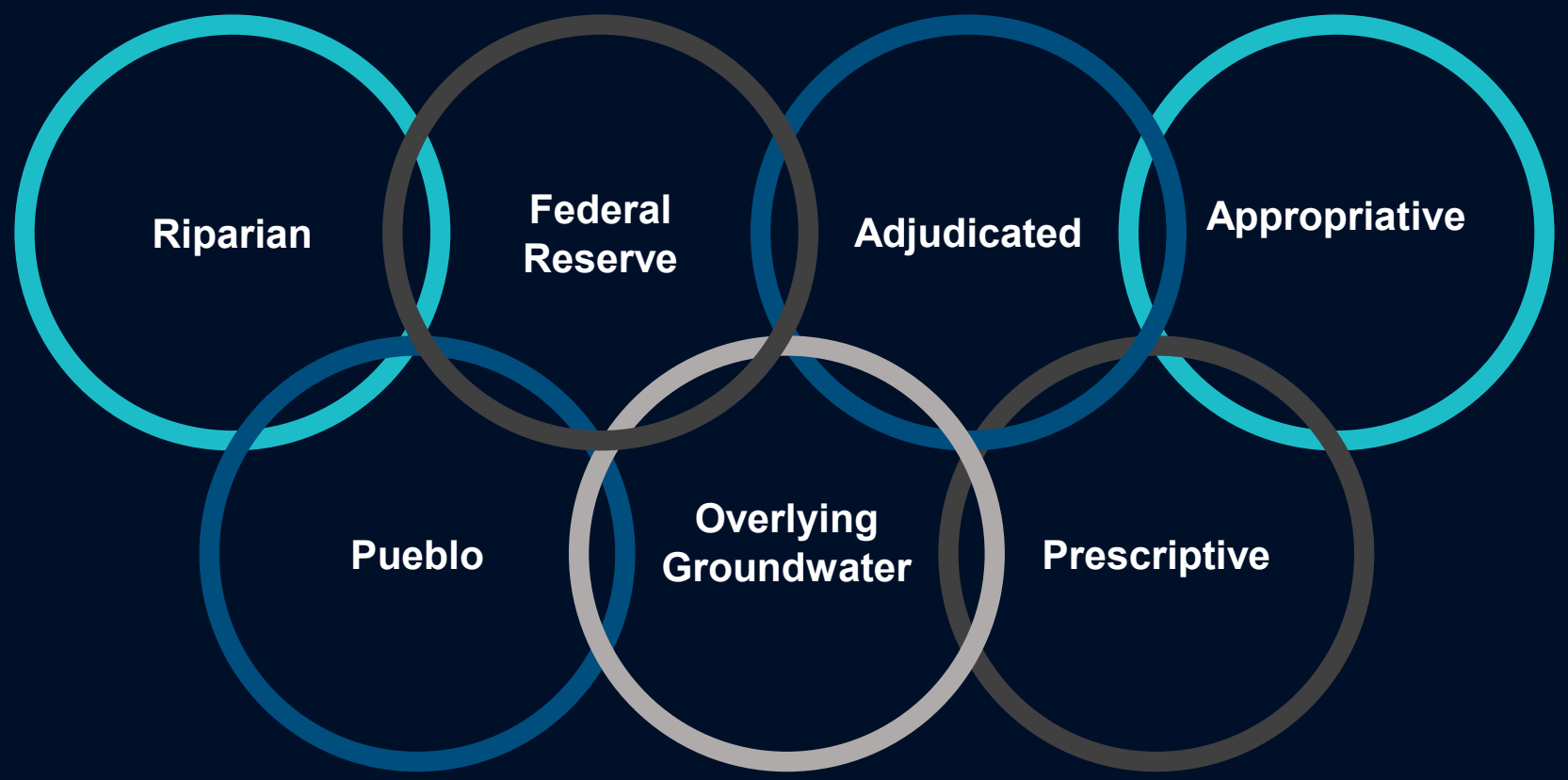
What is a water right?

Legal permission to divert water and apply it to a beneficial use:

- Domestic
- Irrigation
- Municipal
- Industrial
- Mining
- Power
- Recreation
- Fish & Wildlife
- Agriculture
- More



Types of California Water Rights



Types of California Water Rights



Types of California Water Rights





Riparian Rights

Allow landowners to divert water from a water way that borders their property.

- **Natural flow only**
- **Use on riparian land within the watershed**
- **No storage**
- **Not quantified (unless adjudicated)**
- **Correlative – no priority system**
- **Cannot be lost by nonuse**
- **Permit not required**
- **Generally senior to appropriative rights**



Appropriative Rights

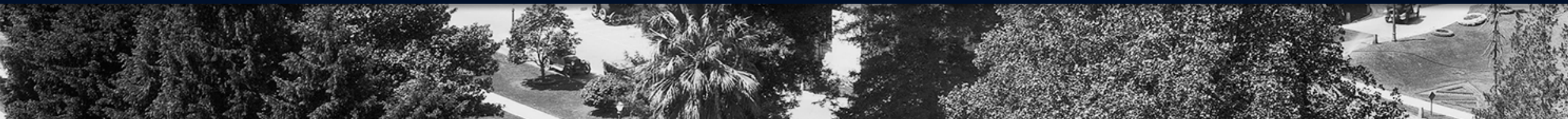
Allow water to be transported away from the water way and stored for later use.

- Began with '49ers posting a notice and then putting the water to use.
- Exist within a hierarchy of priorities – *"First in time, first in right"*
- Cannot be increased
- Can be lost by nonuse
- Can be sold
- Permit required after 1914

Water Commission Act of 1913



- Created the agency that evolved into the State Water Board.
- Established the permitting process for post-1914 appropriative water rights.



More About Water Rights

- 40K rights held by 20K entities
- Half of those rights (30% by volume) are riparian and pre-1914 claims.
- Post-1914 pay fees.
- All right holders must report diversions annually.
- Diversion are measured monthly, weekly, daily, or hourly.
- Data is critical for water management decisions, particularly during drought – roughly 19K water rights curtailed in 2021.

Post-1914 Appropriative Rights

Permits

Registrations



Standard



Temporary



Small
Domestic



Small
Irrigation



Livestock
Stockpond

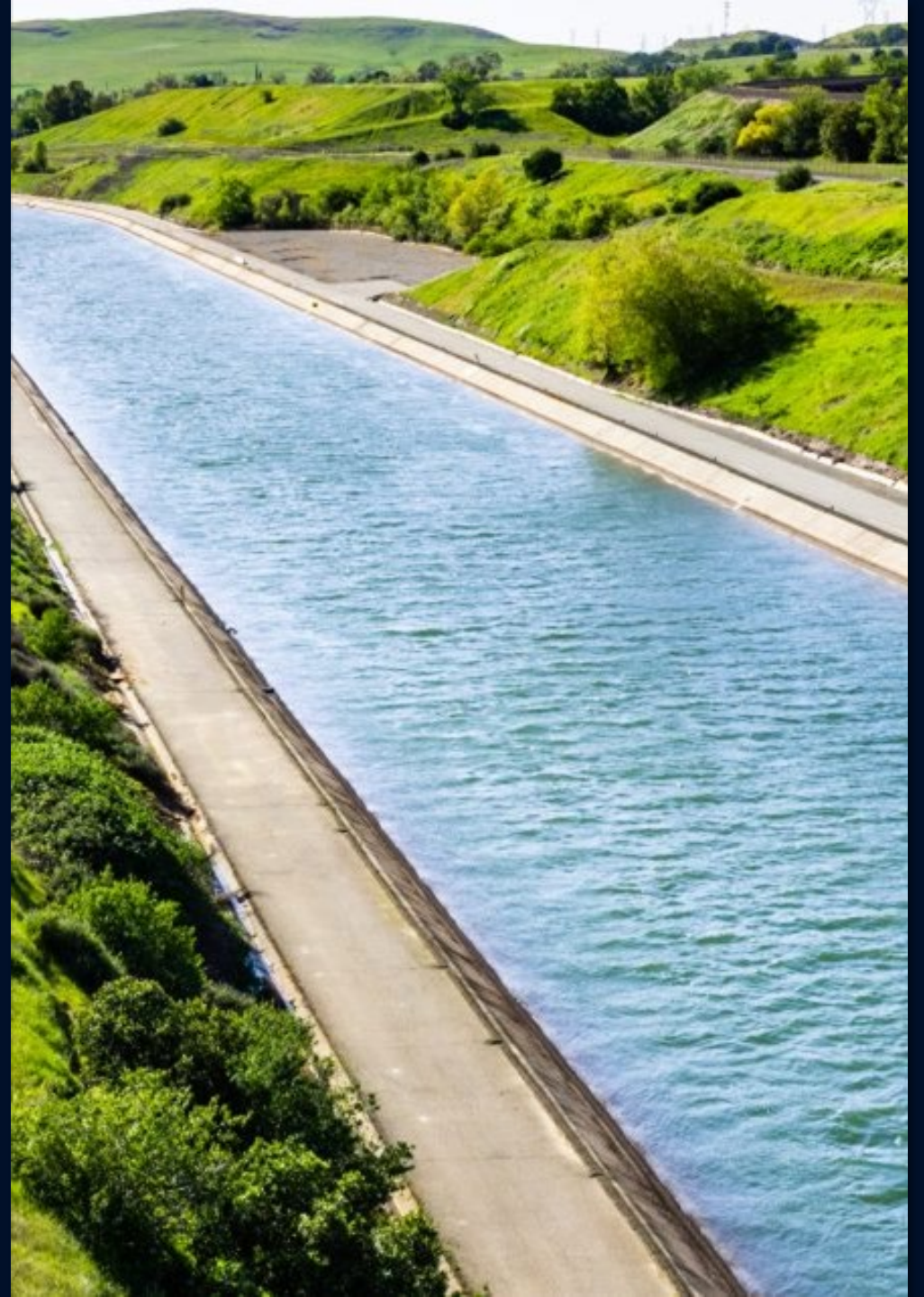
Parts of a Water Right



Standard Permits

Authorize long-term diversion of water with priority date.

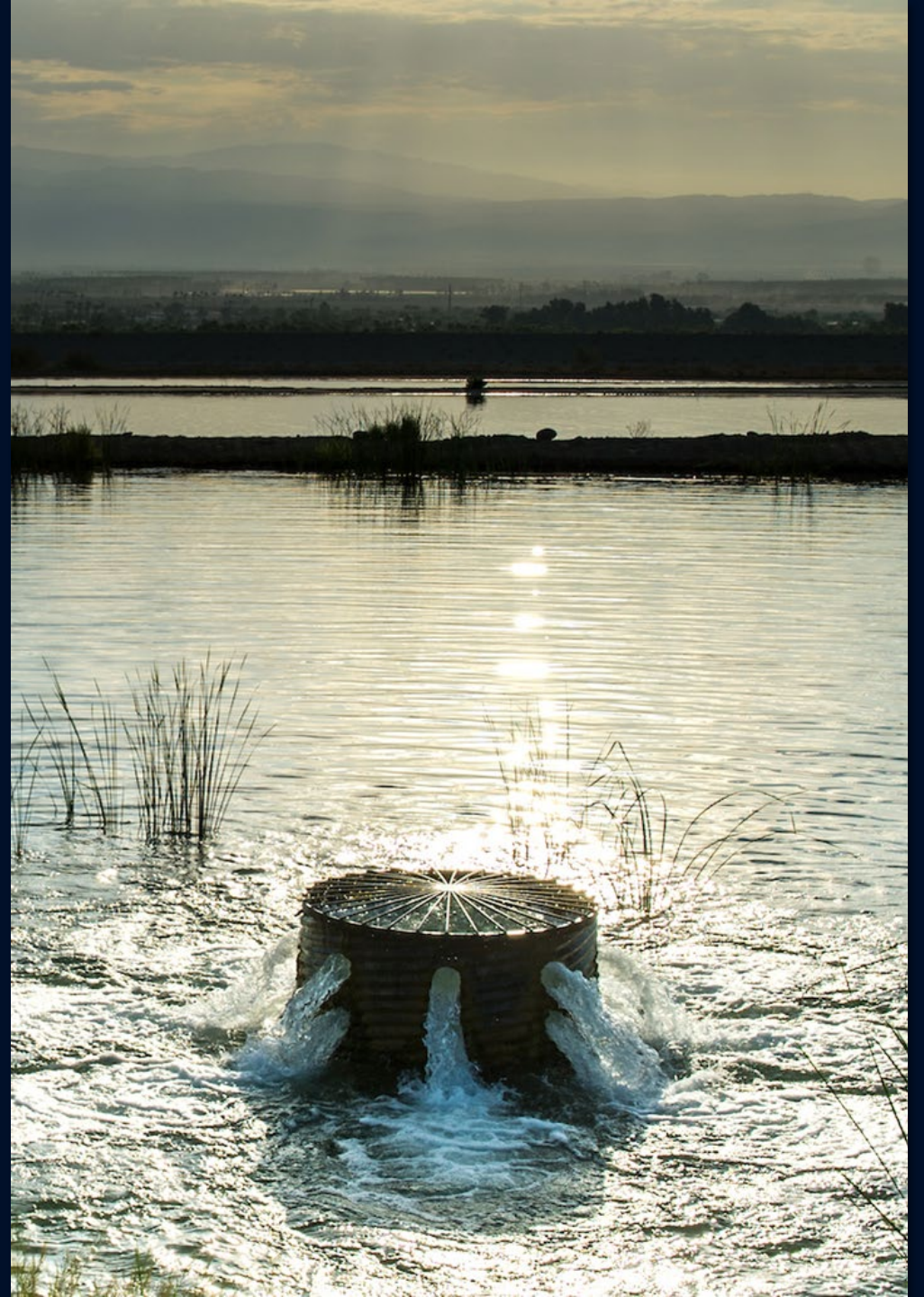
- Application Review & Acceptance
- Public Notice & Protests
- Protest Resolution
- Water Availability Analysis
- CEQA & Public Trust
- Permit Drafted with Protective Terms
- Permit Issued



Streamlined Standard Permits for Recharge

Developed in 2019

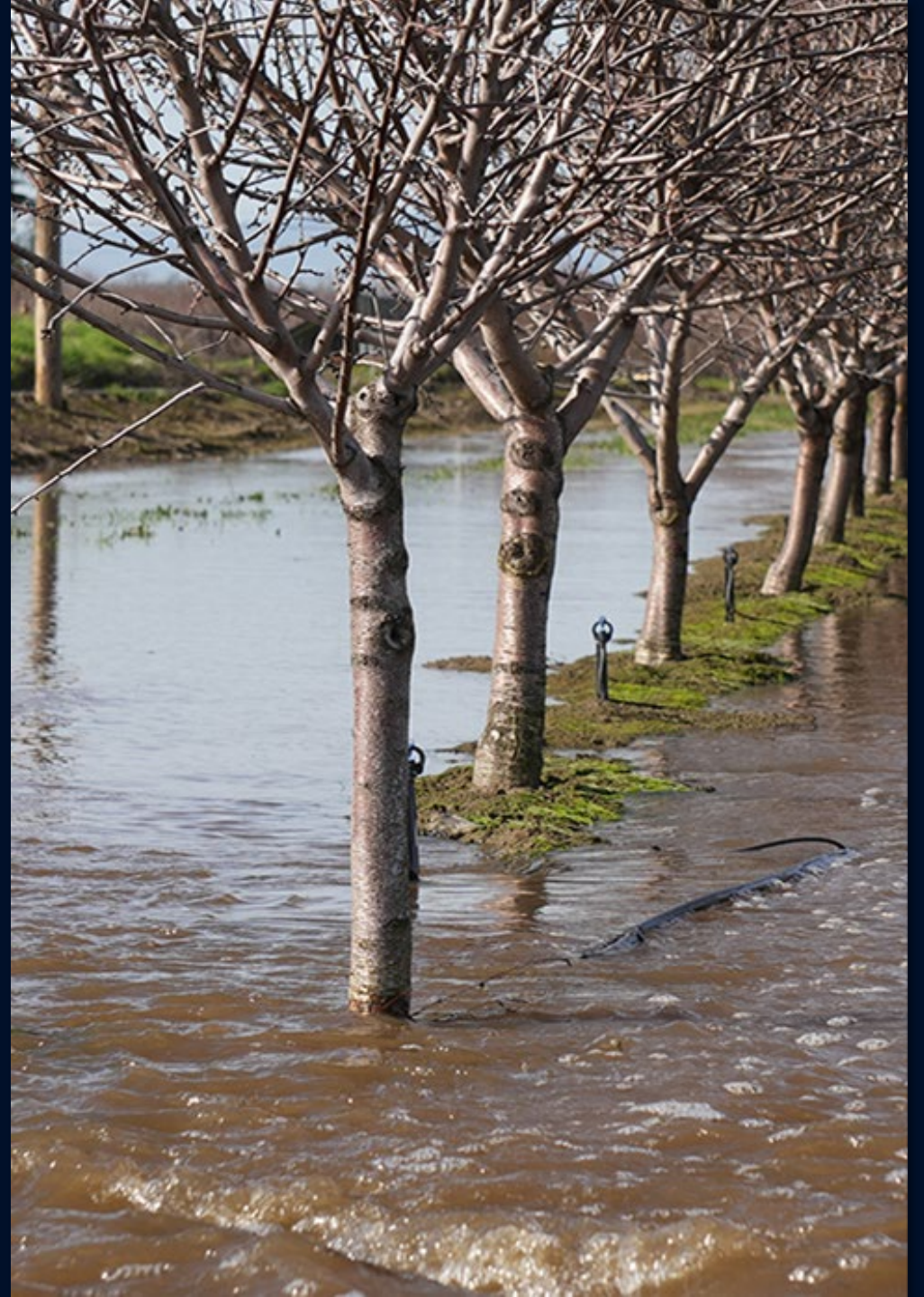
- Limited to GSAs
- Prescriptive method
- Capture to high flow events
- Designed to protect ecosystem functions, instream needs, & senior rights
- Reduced fees



Temporary Permits

Authorize short-term diversion of water without priority date.

- Good for one-time projects, to test viability, or as coverage while pursuing standard permit.
- 180-day
- 5-year
- Not a substitute for a standard right – no priority date



Groundwater Recharge Permitting

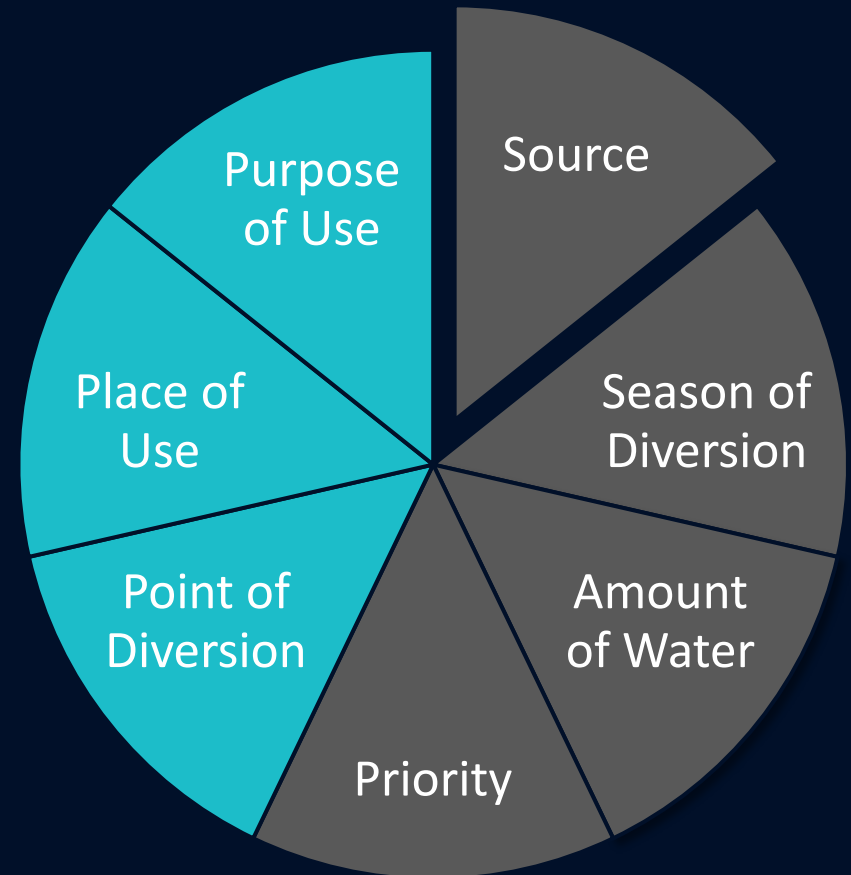


- 43K AF authorized this wet season
- Nine recharge permits issued in 2025/2026
- Two 5-year permits issued in 2023 still in effect
- 1.25M AF authorized since 2019/2020

Changing Water Rights

Standard Change Petitions

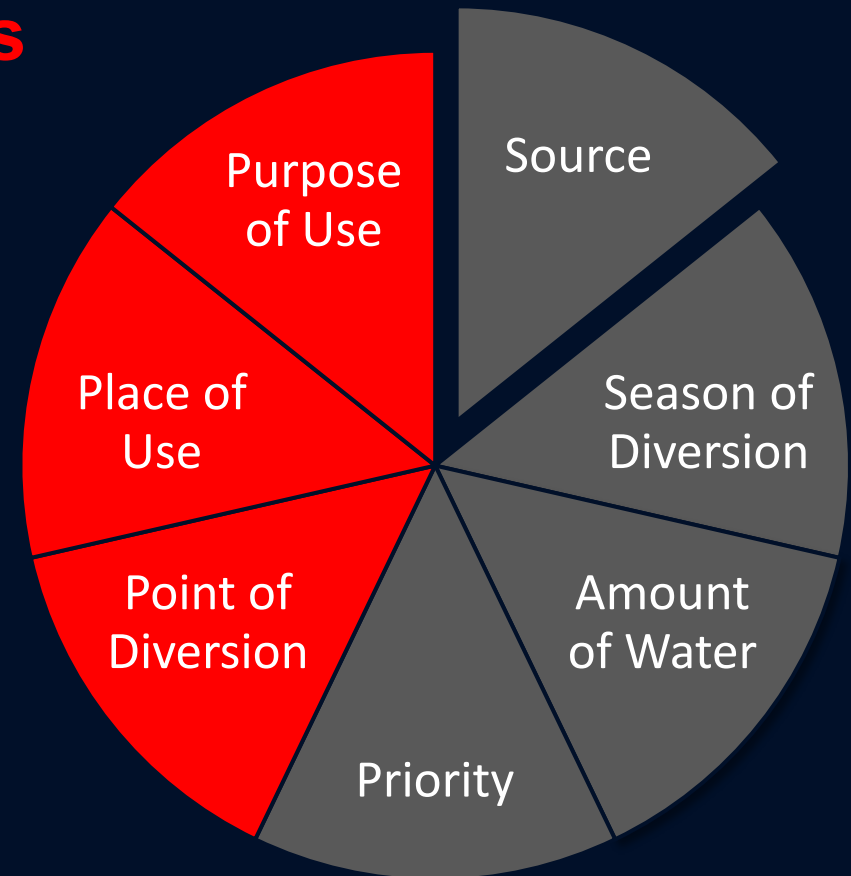
- **Review & Public Notice**
- **Protest Resolution**
- **CEQA & Public Trust**
- **Findings & Order**
- **No expansion of rights**
- **No injury to other right-holders**
- **No unreasonable impacts to fish & wildlife**
- **Changes to pre-1914 do not require Board approval**



Changing Water Rights

Temporary Urgency Change Petitions

- **Must be an urgent need**
- **Allow modifications for up to 180 days**
- **Can be renewed**
- **Order can be issued before noticing**
- **CEQA & Public Trust**
- **Objections Considered**
- **Change is in the public interest**

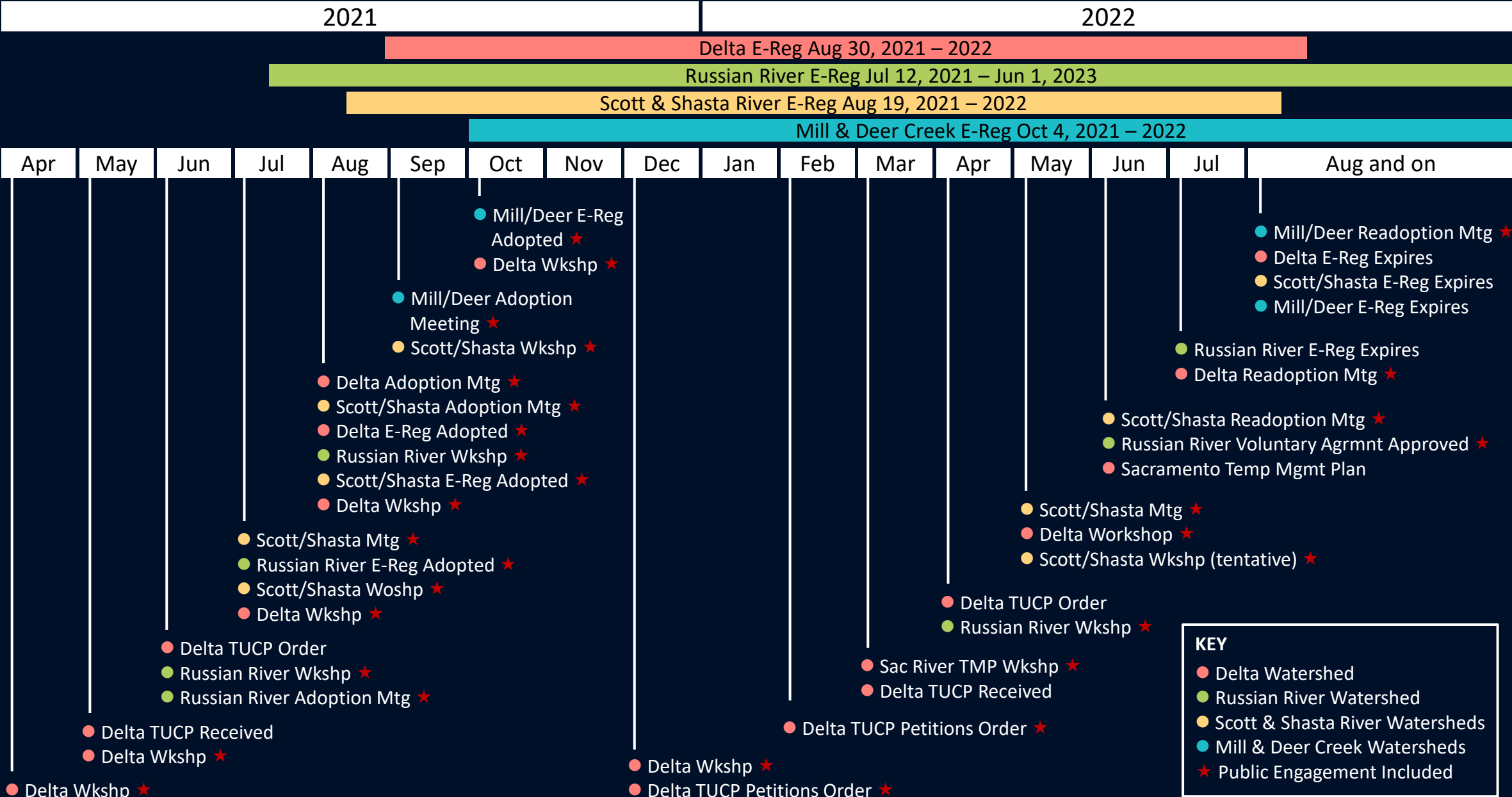


Drought Curtailments

Implement priority system while protecting fish, wildlife, & human health & safety.

- Restrictions in order of priority
- Tied to drought conditions & emergency order (WAT 1058.5)
- Requires a regulation
- Cannot do this in non-drought years
- Lots of engagement & enforcement





Water Rights Enforcement

Goal: Encourage compliance with water rights priority system.

Prompted by inspections, reporting/measurement violations & complaints



**Information
Order**



**Notice of
Violation (NOV)**



**Cease & Desist
Order (CDO)**



**Administrative Civil
Liability (ACL)**

130

License accepted under
WATER COMMISSION, Chapt. 41.
STATE OF CALIFORNIA.

Water License No. 4

Whereas, on the 27th day of October, 1914 and the 23rd day of September, 1916,
H. O. Kohler and A. Schwartz of the County of Nevada State of
California duly made application No. 7 to the State Water Commission,
(formerly the Board of Control, Water Power) of the State of California, for a permit to use the waters of
Scotchman's Creek in the County of Nevada State of California, ...
for the purpose of power, fire protection, domestic and irrigation.

~~Whereas, on the day of 19..,~~
~~a permit was issued to said applicant for the diversion of said water for the term of and~~

Whereas, a favorable report was made upon the said project by the Engineer for the said Water Commission, on the 1st day of November 1916 whereupon said Water Commission became satisfied of the right of the said applicant to a license for the use of the said waters of the said Scotchman's Creek.

Now, Therefore, by virtue of the authority vested in the said Water Commission by the laws of the State of California, we do hereby grant and confirm to the said H. O. Kohler and A. Schwartz ... of the City and County of Nevada the holder and owner of said permit hereinabove men-

Appendix

Water Rights Data Challenges

Example:

2019 Sacramento River Self-Reported Diversions

Nearly 4,000 reporters (>5,000 AFY)

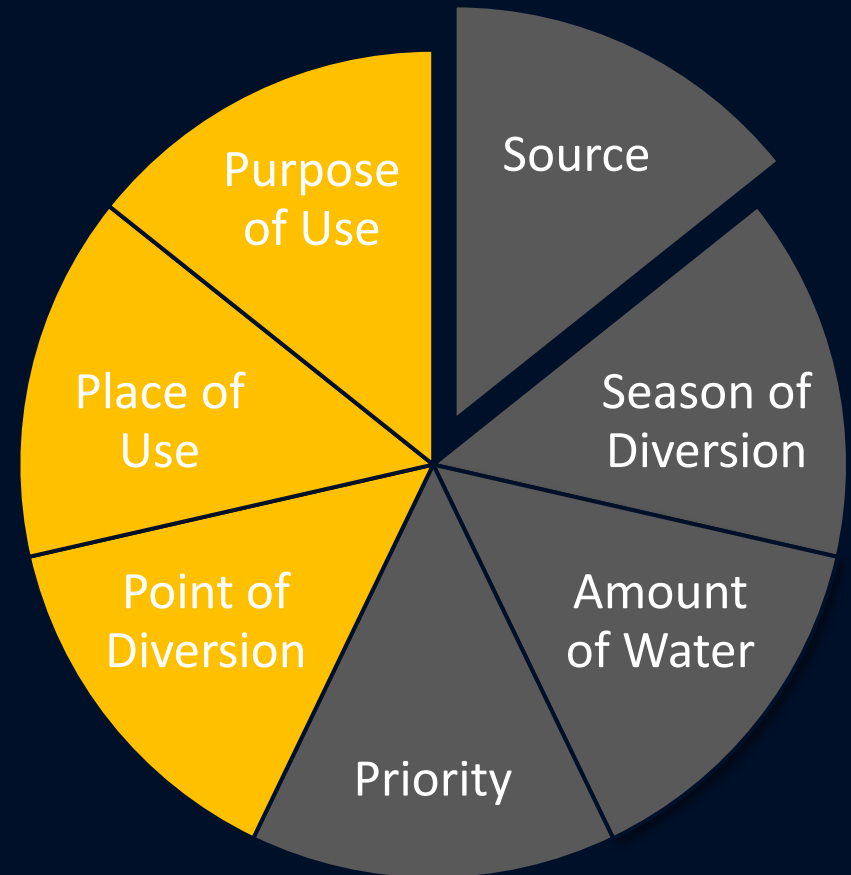
Reported: 29,688,143 AF

Corrected: 4,063,237 AF

Transferring Water Rights

Long-term, short-term or temporary

- 95% between project contractors
- Petition required if changing POD/POU
- Can only transfer water that would have been consumptively used or stored
- Can be limited by the system
- Temporary transfers (180 days) have a tight timeline for processing.



Public Comment

California Water Rights

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Next Engagement Opportunities

Roles and Responsibilities Workshop #2 - Thursday, May 28, 2026. 10am-12pm

Drought Indicator and Metrics Workshop #2 - Friday, June 5, 2026. Morning

DRIP Collaborative Meeting - Friday, July 17, 2026, 10AM - 5PM

Paul Gosselin, CA Department of Water Resources – Deputy Director of Sustainable Water Management

CLOSING REMARKS



California
DRIP Collaborative

Adjourn

Thank you!