California

DRIP Collaborative

Meeting #3

Drought Resilience Interagency & Partners (DRIP) Collaborative

October 25, 2023
Sacramento State University Downtown Center
304 S Street, Sacramento, CA
Large Training Room (DTN104/105)

Meeting Information

1. This meeting is being live streamed and recorded.
2. Members of the public are welcome to listen. A public comment session is included later in 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!

Anthony Navasero, P.E., CA Department of Water Resources

WELCOMING REMARKS

Desired Meeting Outcomes

Outcome #1: Finalize problem statements for three prioritized DRIP Collaborative focus areas, building on past discussions.

Outcome #2: Identify actions that DRIP Collaborative can take in 2024 to directly address those problem statements, with focus on roles and responsibilities, timeline, and resources. Also, develop sequence and approach for addressing other remaining focus areas.

Outcome #3: Align on process for developing the 2023 DRIP Collaborative Annual Report.

Meeting Agenda

1. Welcome and Introductions
2. Discussion and Refinement of Priority Focus Areas
3. LUNCH
4. Discussion and Refinement of Priority Focus Areas (cont.)
5. Sequencing Remaining Focus Areas for Inclusion in the DRIP Roadmap
6. BREAK
7. Presentation of Annual Report Outline
8. Public Comment
9. Informational Items
10. Action Item Review and Closing Comments

What's a Roadmap? It's an action plan that defines our collective work to achieve our purpose. Includes specific timeframes and milestones. Provides clarity on the role that DRIP will play and how it will directly improve drought resilience outcomes.

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)).

DEVELOPING A DRIP ROADMAP

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DRIP: What we hope to do over time

What is the one thing members most hope DRIP accomplishes...

...in its first 1-2 years

"Provide clarity on **existing metrics, tools, and programs** for drought response. Understand how we **collectively contribute** and build on lessons learned. **Identify areas** that can lead to solutions for drought resilience."

"Identification of **drought resilience needs** by sector."

"A **roadmap**. Establish clear pathways. Concrete **action plan** that is agreed on by all parties."

...in years 3-5

"**Implementing programs** and guidance to support communities with water issues and conflicting water demand (ag and housing and domestic use)."

"Implement **meaningful solutions** that build capacity at local scales."

"**Strategies to implement** as appropriate around the state (more strategic than past grant processes)."

Building a foundation for impact

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 & Beyond – Implementation
High impact, more difficult work.
System change (as needed)

2025+

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DRIP Collaborative: Our process so far

April 6th, 2023
DRIP Meeting #1

- Introductions
- Building relationships
- Hearing individual priorities
- Initial ideation and shared goals

July 20th, 2023
DRIP Meeting #2

- Define process
- Deepen relationships
- Explore key themes and priorities
- Achieve initial level of possible focus areas

August & October
DRIP Virtual Meetings

- Identify initial focus areas and their working problem statements
- Discuss approach to other focus areas
- Create list of knowledge development topics

Virtual Meeting 1 Recap

VM1 Objective: Align on a select list of focus areas that DRIP members would like to further refine in preparation for Oct 25 and possible inclusion in the Annual Report.

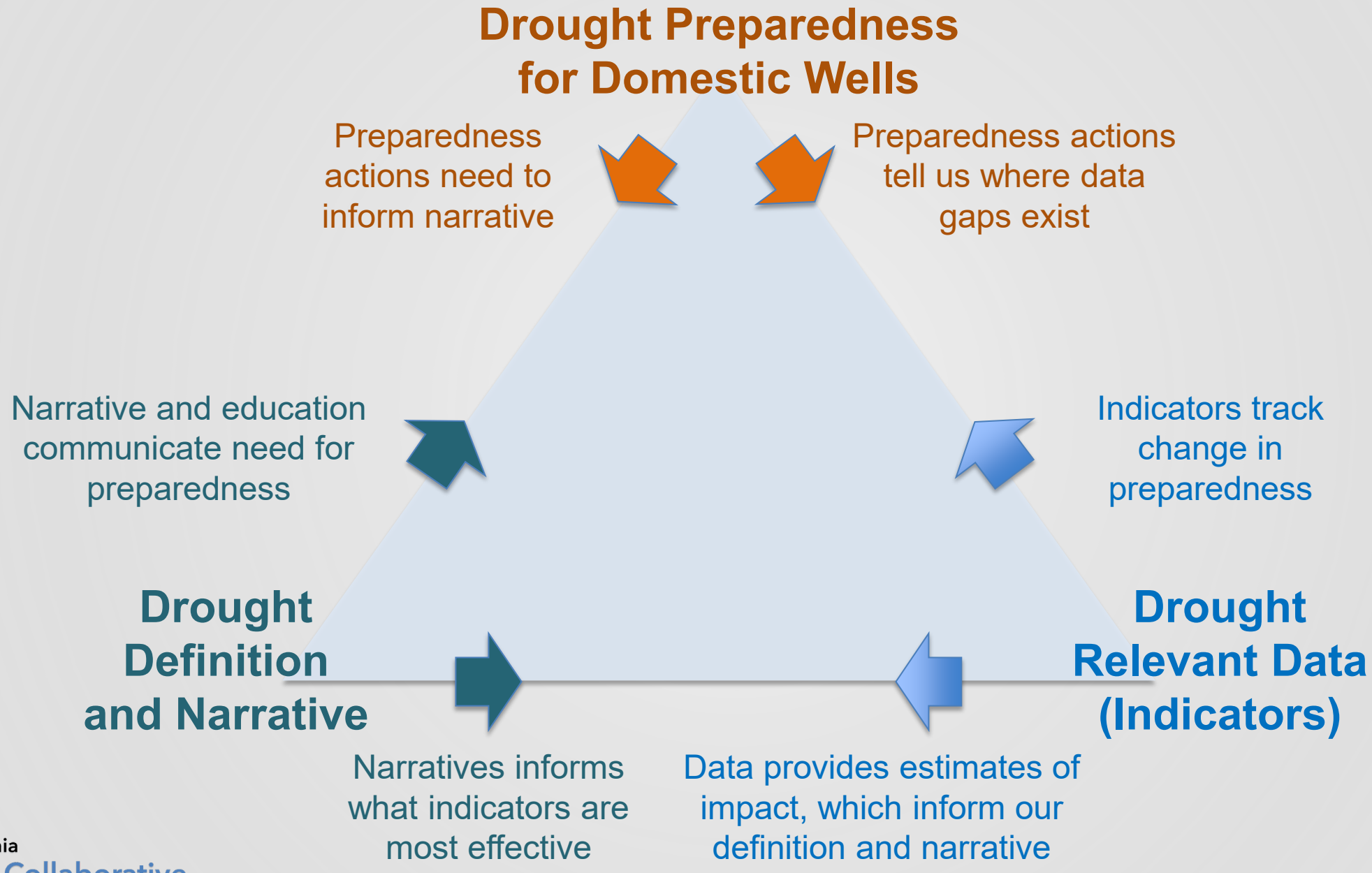
Approach: During the week of August 21, 2023, there was a series of three virtual meetings (VM1.1, 1.2, 1.3) for DRIP members to discuss the topic of focus areas. Each of the three virtual meetings received the same presentation.

Attendance: In total, 21 DRIP members joined across the three VM1s (78% participation rate).

Outcomes: In addition to alignment on three focus areas, the VM1s identified the need for shared language and the building of baseline knowledge within DRIP membership. Focus areas:

- Drought Preparedness for Domestic Wells
- Drought Definition & Narrative
- Drought Relevant Data

Today's Focus Areas: Highly related



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What's a Focus Area? Ideas, opportunities, and aspirations that DRIP members have identified as important to improved California drought resiliency. These were captured on the Reference List. Each focus area is intended to be specific and actionable for DRIP.

REFINEMENT OF PRIORITY FOCUS AREAS

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Discussion Objectives

Meeting 3 Objective 1: Finalize problem statements for three prioritized DRIP Collaborative focus areas, building on past discussions.

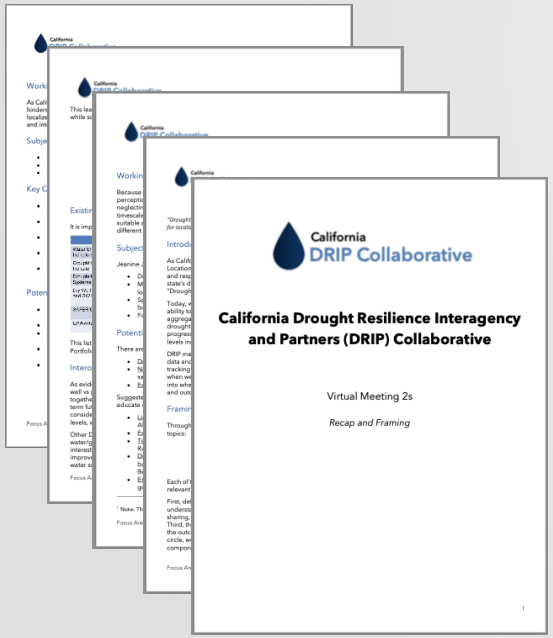
Meeting 3 Objective 2: Identify actions that DRIP Collaborative can take in 2024 to directly address those problem statements, with focus on roles and responsibilities, timeline, and resources. Also, develop sequence and approach for addressing other remaining focus areas.

Discussion Format, General

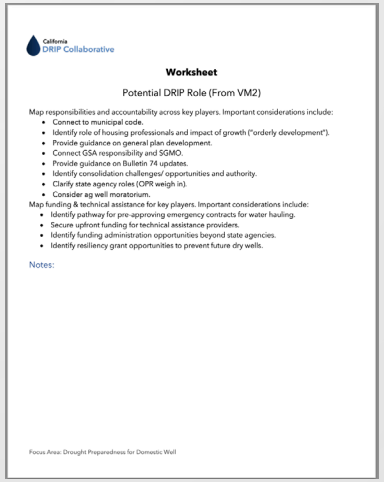
Schedule: Two morning sessions, one afternoon session.

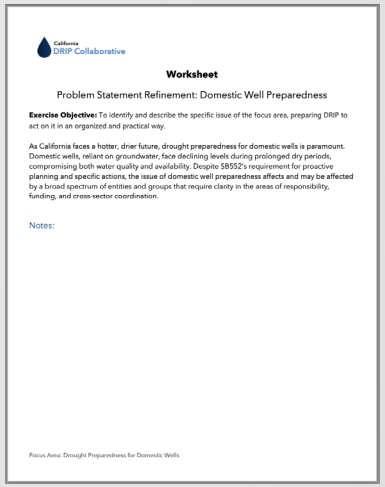
Be Additive: Use your handouts to ensure that you're up to speed on the focus area so that your comments and suggestions move the conversation forward.

- Virtual Meeting 2 Recap and Framing. Use this for detailed background and direct quotes from members specific to the focus area.



- Worksheets. Use these for taking personal notes or notes to share with the DRIP support team directly.





Discussion Format per Focus Area

Time in min (45 total)		Topic	Action	Objective
Elapsed	Duration			
8	8	VM 2 **Recap**	Review and a few comments	Establish shared starting point for the conversation
15	7	DRIP **Comments**	Voice critical additions	Hear reactions from DRIP members who did not participate in the VM2 meeting
20	5	**Problem Statement**	Refine and finalize	Make final edits to problem statement. Ensure aligned to DRIP purpose
40	20	DRIP **Actions**	Immediate actions and sequence	Discuss actions we should collectively take in 2024
45	5	**Next steps**	Indicate availability	Align on how to make progress toward April 2024 DRIP Meeting #4

Timing is tight…please focus on additive comments.
This will allow us to use most of our time together to move from ideas to actions

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Virtual Meeting 2 Recap, General

VM2 Objective: For each focus area, develop a problem statement, goals and objectives to be presented at Meeting 3. Identify where opportunity potentially fits on the DRIP roadmap.

Approach: During the week of October 2nd, we held virtual meeting 2 for the three focus areas. Given the varying topics, the approach varied, with presentations from subject matter experts and/or framing documents.

Attendance: In total, 16 DRIP members joined across the three VM2s (62% participation rate), although attendance varied by focus area.

Outcomes: Working problem statements and potential DRIP Roles identified for discussion today.

VM2 Recap & Comments

Drought Preparedness for Domestic Wells

"This topic is the most important thing DRIP can do." – Andrew Altevogt

"There are two pieces of this puzzle: existing wells and future wells." – Sierra Ryan

"We need programs for wells before they go dry, focus on resiliency." – Suzanne Pecci

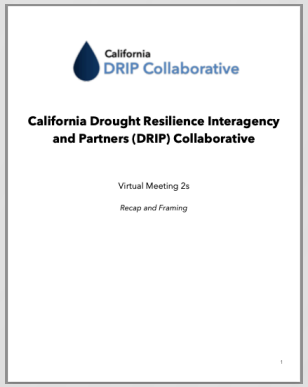
Sub-topics for Focus Area

- Responsibility and accountability
- Funding, financing and technical assistance
- Coordination and information flow across federal, state, local, tribal, non-state, and NGOs

Discussion Instructions:

- Skim your handout on VM2: Drought Preparedness for Domestic Wells
- For members who attended this VM2, recap in your words: "This focus area..."
- For members who did not attend this VM2, questions or additive comments?

Handout pages 2-4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Virtual Meeting 2s

Recap and Framing

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5 min

Problem Statement

Drought Preparedness for Domestic Wells

"As California faces a hotter, drier future, drought preparedness for domestic wells is paramount. Domestic wells, reliant on groundwater, face declining levels during prolonged dry periods, compromising both water quality and availability. Despite SB552's requirement for proactive planning and specific actions, the issue of domestic well preparedness affects and may be affected by a broad spectrum of entities and groups that require clarity in the areas of responsibility, funding, and cross-sector coordination."

Key Question: Does this statement capture the essential problem?

Instructions:

- Turn to the neighbor on your left and discuss (2 minutes)
- Be ready to share any additive, critical comments to the group (3 minutes)
- For any wordsmithing, edits or other non-critical comments, please write on your worksheet for this focus area and pass your notes to DRIP support after this session

DRIP Actions

Drought Preparedness for Domestic Wells

Map responsibilities and accountability across key players.
Important considerations include:

- Connect to municipal code.
- Identify role of housing professionals and impact of growth.
- Provide guidance on general plan development.
- Connect GSA responsibility and SGMO.
- Provide guidance on Bulletin 74 updates.
- Identify consolidation challenges/ opportunities and authority.
- Clarify state agency roles (OPR weigh in).
- Consider ag well moratorium.

Map funding & technical assistance for key players.
Important considerations include:

- Identify pathway for pre-approving emergency contracts for water hauling.
- Secure upfront funding for technical assistance providers.
- Identify funding administration opportunities beyond state agencies.
- Identify resiliency grant opportunities to prevent future dry wells.

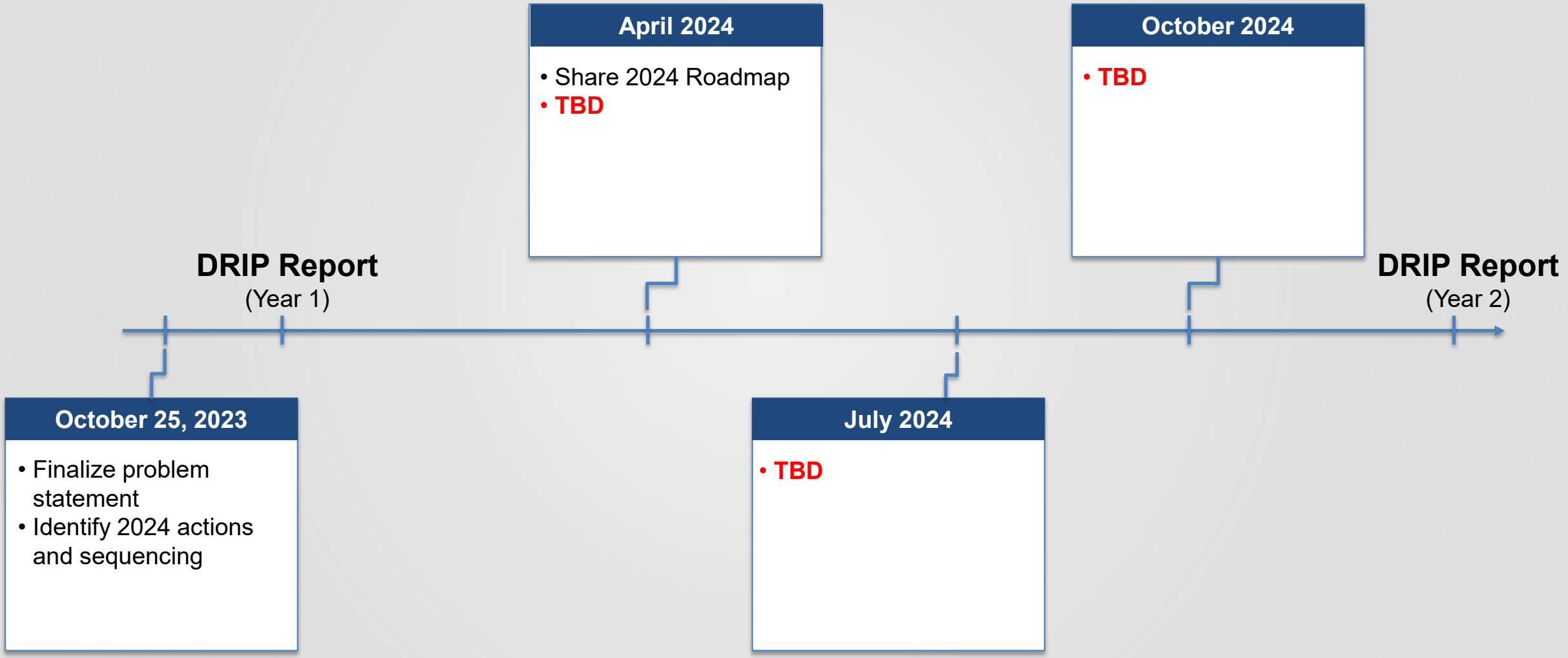
Key Question: Does this capture the essential actions you would like DRIP to advance?

Instructions:

- On your worksheet, circle 2-3 actions you recommend we sequence up front for early 2024 and/or write down any additional actions you think DRIP should pursue related to the problem statement of this focus area
- Be ready to share any of your perspective as additive, critical comments to the group during the sequencing exercise

DRIP 2024 Actions: Domestic Wells

What 2-3 actions would you recommend be sequenced for early 2024?



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5 min

Next Steps

Drought Preparedness for Domestic Wells

Recommended Next Steps: Continue Virtual Meetings to move focus area forward between now and April 2024 in-person meeting. Suggested format:

Q1 2024: Focus Area Virtual Meetings

- Objective: Outline and sequence actions.
- Deliverable: Workplan for focus area to integrate into 2024 Roadmap presented at April 2024 meeting
- Timing: Q1 2024, Jan-Mar
- Organization: Facilitated by DRIP support team, driven by member input. All members will receive an invitation to join

Member input: Please raise your hand now or email drip@water.ca.gov if you would like to be involved in the development of potential Virtual Meetings for this focus area in early 2024.

Are there other next steps you would suggest between now and April 2024?

VM2 Recap & Comments

Drought Relevant Data

"Drought indicators across sectors are important for understanding how drought impacts individuals. They're essential for localizing drought response." – Nancy Vogel, CNRA

"We need a data education program to the community about what is available, how to collect good data, how it can be used. Down to boots on ground and then back up." – Emily Moloney, Buena Vista Rancheria of Me-Wuk Indians

"Maybe the DRIP role is to help shape best available info to improve day to day management." – Justine Massey, CWC

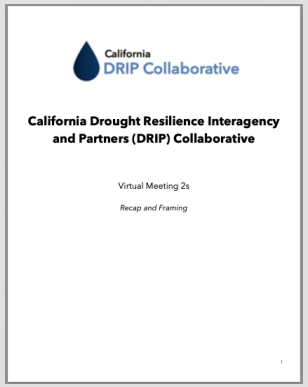
Sub-topics for Focus Area

- Regional and sector specific drought indicators
- Coordination, data sharing and easier access to water/ drought data
- Data collection, integration, and quality assurance for better decision-making
- Incorporating climate change data and projections in water resource planning

Instructions:

- Skim your handout on VM2: Drought Relevant Data
- For members who attended this VM2, recap in your words: "This focus area..."
- For members who did not attend this VM2, questions or additive comments?

Handout pages 5-7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Virtual Meeting 2s

Recap and Framing

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5 min

Problem Statement

Drought Relevant Data

As California faces a hotter, drier future, a lack of sector-specific metrics and streamlined data coordination hinders timely decision-making, jeopardizing drought resilience. To ensure adaptive, effective, and localized strategies throughout the drought lifecycle, it is crucial to bridge data gaps, unify drought data, and integrate climate change analytics across decision-making tiers statewide.

Key Question: Does this statement capture the essential problem?

Instructions:

- Turn to the neighbor on your left and discuss (2 minutes)
- Be ready to share any additive, critical comments to the group (3 minutes)
- For any wordsmithing, edits or other non-critical comments, please write on your worksheet for this focus area and pass your notes to DRIP support after this session

DRIP Actions

Drought Relevant Data

- Shape best available information
- Coordination of data
- Align on widely accepted data used to drive agency decision making
- Use data resources to feed up and down to decision makers and actors at all levels
- Education programs on what is available, how to collect good data, and how it can be used at the local level.

Key Question: Does this capture the essential actions you would like DRIP to advance?

Instructions:

- On your worksheet, circle 2-3 actions you recommend we sequence up front for early 2024 and/or write down any additional actions you think DRIP should pursue related to the problem statement of this focus area
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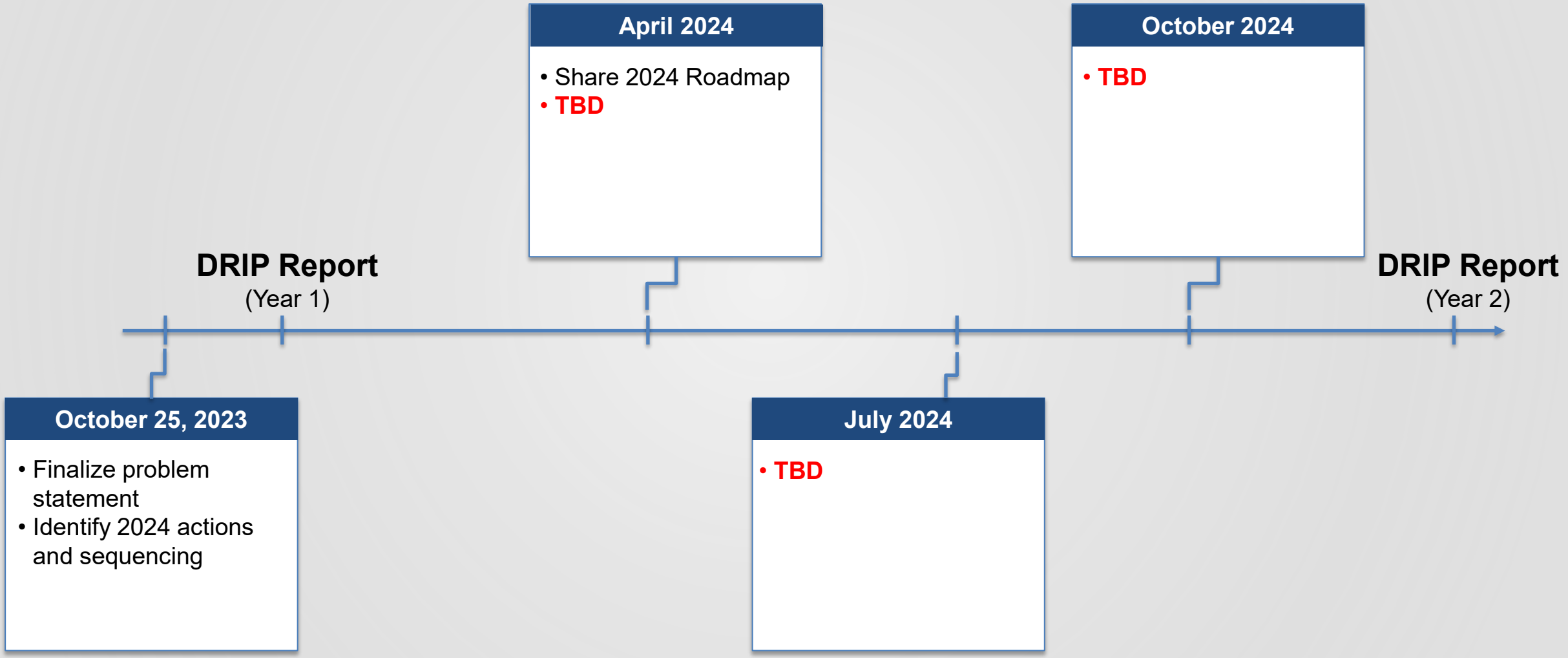
DRIP 2024 Actions: Drought Relevant Data

What 2-3 actions would you recommend be sequenced for early 2024?



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5 min

Next Steps

Drought Relevant Data

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Member input: Please raise your hand now or email drip@water.ca.gov if you would like to be involved in the development of potential Virtual Meetings for this focus area in early 2024.

Are there other next steps you would suggest between now and April 2024?

LUNCH BREAK!

PLEASE RETURN AT:
12:55pm
(so we can start promptly at 1pm)

VM2 Recap & Comments

Drought Definition & Narrative

"Point to it and tell people what they can do. Link definitions to action." – Andrew Altevogt

"*We need a campaign, education. Wrap that into existing programs.*" – Tami McVay

"*We struggle with the media. Would be good to point this out. We'll need good communication.*" – Jeanine Jones, subject matter expert

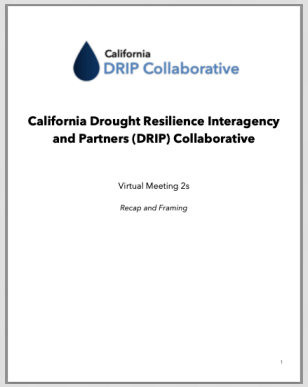
Sub-topics for Focus Area

- Definition
- Narrative and communication
- Education

Instructions:

- Skim your handout on VM2: Drought Definition & Narrative
- For members who attended this VM2, recap in your words: "This focus area..."
- For members who did not attend this VM2, questions or additive comments?

Handout page 8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Virtual Meeting 2s

Recap and Framing

California DRIP Collaborative

5 min

Problem Statement

Drought Definition and Narrative

"Because drought has many different definitions, from biophysical to social, people vary greatly in their perception and experience of it. Historically, drought planning has focused on physical definitions, often neglecting (or ignoring) more nuanced social aspects and indicators that often play out over varying timescales. The narratives people form around drought offer varied interpretations of drought effects and suitable adaptation strategies, making "drought resilience" a debated and nuanced term, often different for different audiences."

Key Question: Does this statement capture the essential problem?

Instructions:

- Turn to the neighbor on your left and discuss (2 minutes)
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DRIP Actions

Drought Definition & Narrative

Suggested 1st step: Create a white paper that outlines current drought definitions and processes.

Suggested next steps:

- Link to actions. Provide guidance for what the public can do to take action across different resilience resources.
- Education. Campaign and link to existing programs.
- Tie to local. Continue documenting lessons learned and best practices at the local level.
- Drive toward resilience. Iterate and connect back to drought resiliency.
- Ensure no confusion. Communicate to the media to expand the message.

Key Question: Does this capture the essential actions you would like DRIP to advance?

Instructions:

- On your worksheet, circle 2-3 actions you recommend we sequence up front for early 2024 and/or write down any additional actions you think DRIP should pursue related to the problem statement of this focus area
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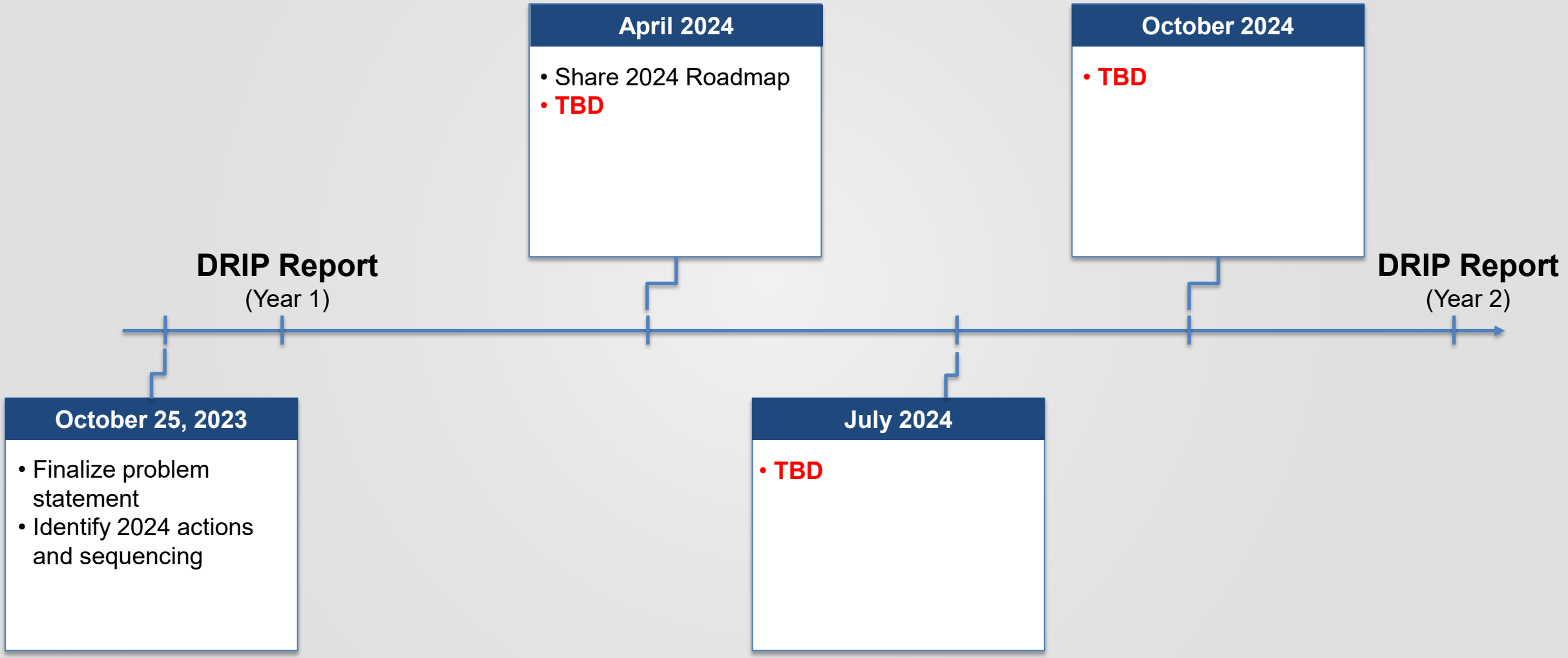
DRIP 2024 Actions: Definition and Narrative

What 2-3 actions would you recommend be sequenced for early 2024?



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5 min

Next Steps

Drought Definition & Narrative

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Are there other next steps you would suggest between now and April 2024?

What's a Focus Area? Ideas, opportunities, and aspirations that DRIP members have identified as important to improved California drought resiliency. These were captured and grouped into categories on the Reference List. Each focus area is intended to be specific and actionable for DRIP.

SEQUENCING OF OTHER FOCUS AREAS

Sequencing Remaining Focus Areas

Meeting 3 Objective 2: Identify actions that DRIP Collaborative can take in 2024 to directly address those problem statements, with focus on roles and responsibilities, timeline, and resources. Also, develop sequence and approach for addressing other remaining focus areas.

Moving from Reference List to Problem Statement: Like the process of VM1, we will work to align on the sequencing of focus areas to further refine over the course of 2024 and beyond.

Not Refining, Yet: These focus areas are broad. Sequencing will help to identify where and when Virtual Meetings may be held to align on working problem statements to bring forth to future in-person DRIP meetings.

Sequencing Remaining Focus Areas

Specific and Actionable Focus Areas for Consideration:

- Integrating Climate Change Adaptation into Drought Resilience
- Implementation of Nature-based Solutions for Drought Resilience
- Reducing Ecosystem Impacts of Drought
- Water Resources & Operations
- Infrastructure & Planning
- Land Use Planning

...what else?

Sequencing Remaining Focus Areas: Exercise

- We need your help sequencing the next set of focus areas!
- "High impact/low effort" issues can be thought of as the "low hanging fruit" and should be addressed first.
- "High impact/high effort" issues are critical items you feel will take more time/resources to address and should be addressed next.
- "Low impact/low effort" may be addressed next, followed by "low impact/high effort"

Instructions:

- Using the sticky notes in front of you, write your name and a focus area title on each note, then place the sticky in the corresponding box on the wall.

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Sequencing Remaining Focus Areas

Specific and Actionable Focus Areas for Consideration:

- Integrating Drought with Climate Change Adaptation (Climate Change)
- Implementation of Nature-based Solutions for Drought Resilience (Nature-Based Solutions)
- Reducing Ecosystem Impacts of Drought (Ecosystem Impacts)
- Water Resources & Operations (Operations)
- Infrastructure & Planning (Infrastructure)
- Land Use Planning for Drought Preparedness (Land Use Planning)

...what else?

BREAK!

PLEASE RETURN AT:
[INSERT TIME]

What's an Annual Report? In the context of DRIP, the Annual Report is an annual document used to memorialize the feedback from the DRIP meetings, support the funding needs or other changes to support proactive planning and implementation of drought efforts.

DRIP COLLABORATIVE ANNUAL REPORT

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Annual Report

- Purpose
  - Memorialize feedback during DRIP meetings; express the Collaborative's support for: funding needs, other changes to support proactive planning and implementation of drought efforts
- Audience
- Scope
- Timeline
  - Draft: Early December
  - Publish: Jan 2024

DRIP Governance for Future Annual Reports/Decisions

- The first Annual Report will serve as a recap of discussions to date and priorities moving forward. No formal decisions are needed!
- Moving forward, DRIP agreement will be requested for recommendations and future Annual Reports.
- According to the DRIP Charter (included in DRIP Binder): "When it is necessary for the Collaborative to make decisions, it will seek consensus where possible. Otherwise, decisions will be approved by a majority vote of the members present at the meeting, as determined by a poll by the Chair."

PUBLIC COMMENT

Public Comment

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.

INFORMATIONAL ITEMS

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Informational Items

1. Hydrology & Conditions Update- Jeanine Jones, DWR
2. Status Report on SB 952 County Task Forces- Julie Ekstrom, DWR
3. Update on Domestic Well Data- Ben Brezing, DWR
4. Overview of Informational “101” Series/Topics- Clare Keating and Sam Magill, Consultants

Jeanine Jones, CA Department of Water Resources

INFORMATIONAL ITEM 1

HYDROLOGY & CONDITIONS UPDATE

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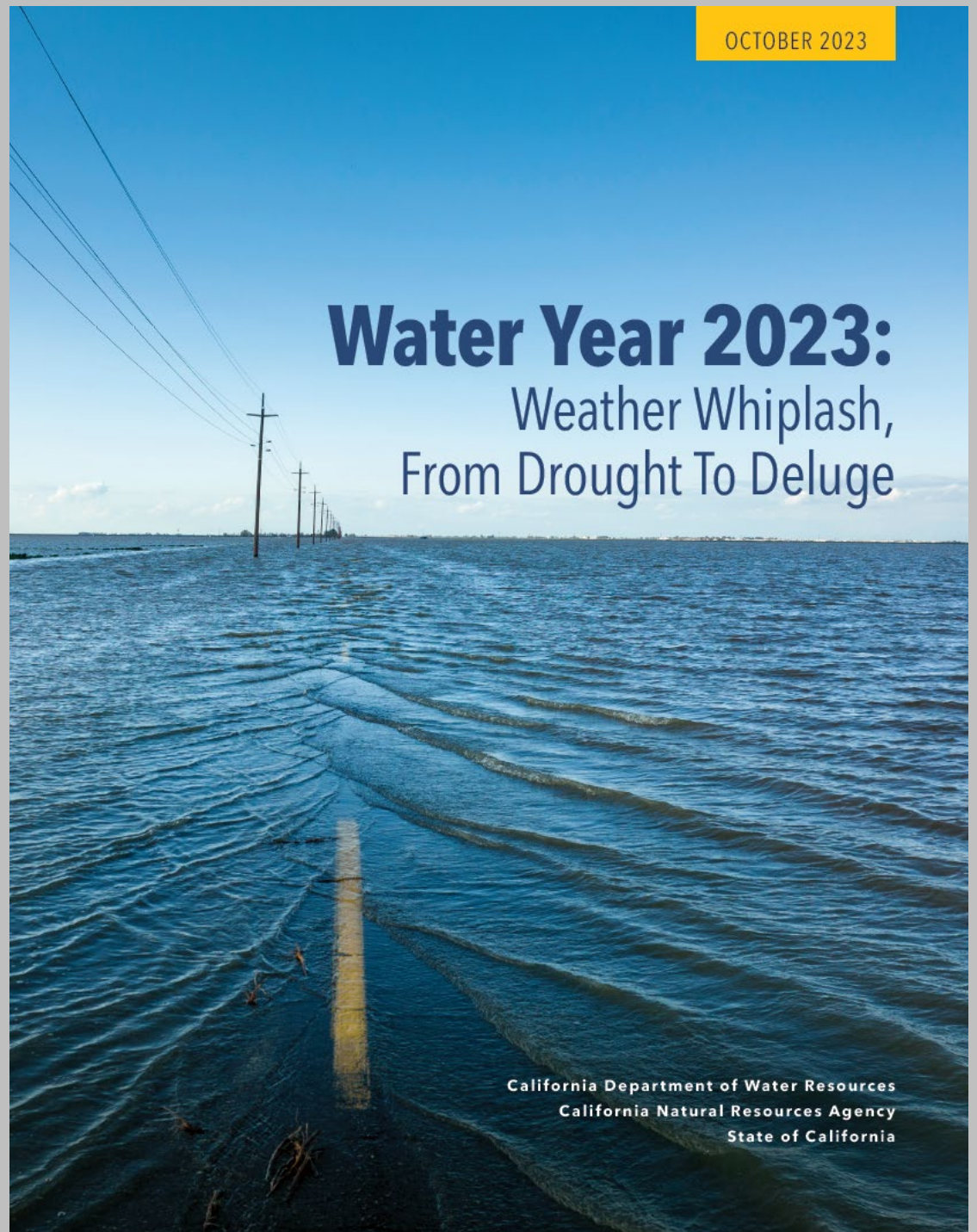
California Water Conditions

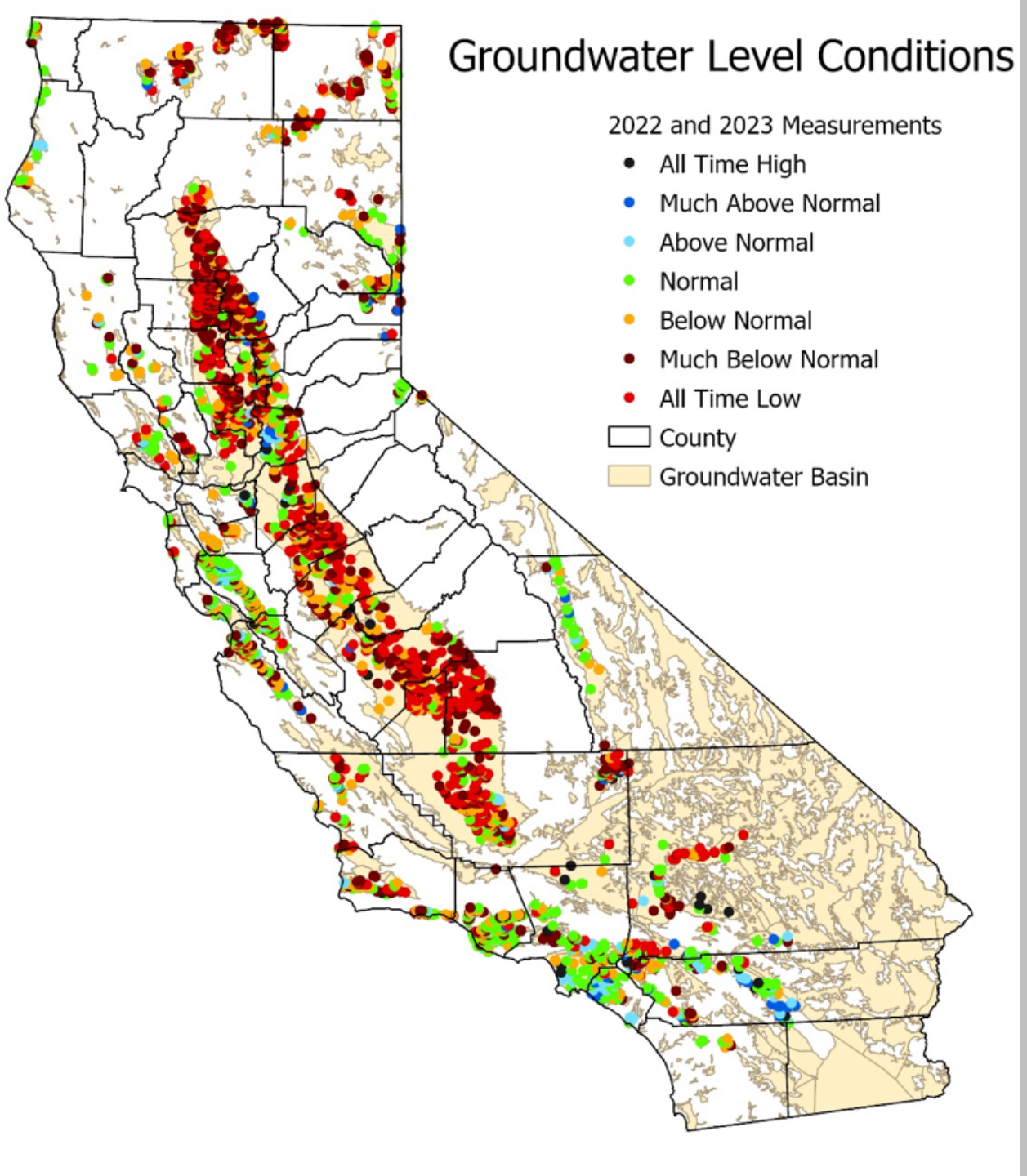
Jeanine Jones, California Department of Water Resources



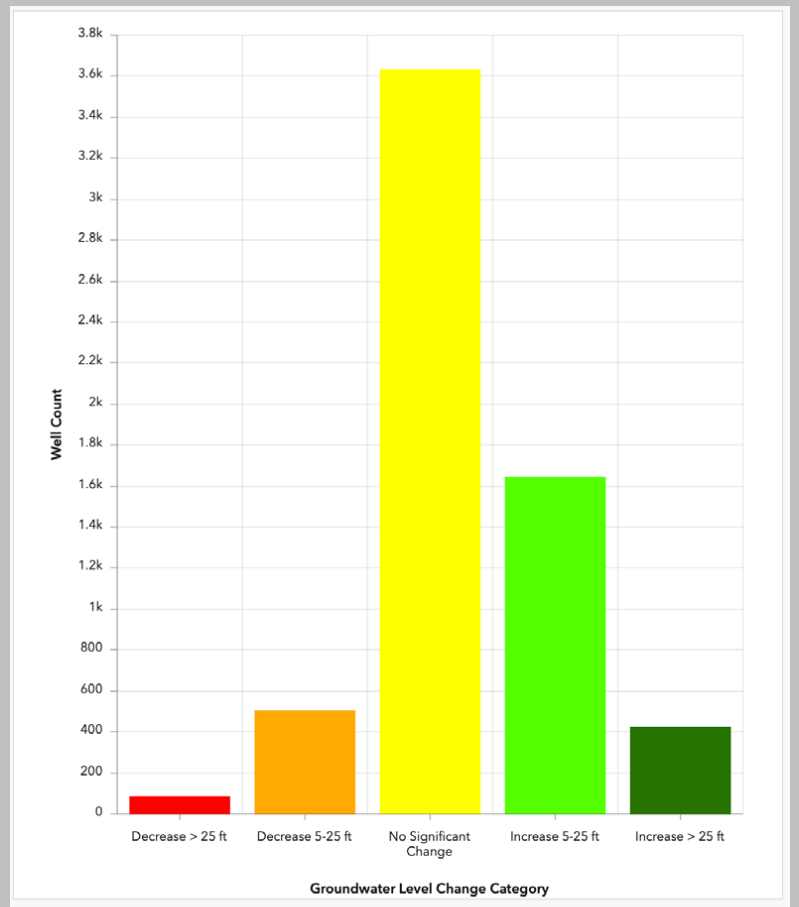
https://water.ca.gov/-/media/DWR-Website/Web-Pages/Water-Basics/Drought/Files/Publications-And-Reports/Water-Year-2023-wrap-up-brochure_01.pdf

End of Sept Statewide Reservoir Storage

Water Year	Statewide Reservoir Storage end of September (MAF)	Percent of Historic Average
2023	29.4	129
2022	14.2	67
2021	12.5	58
2020	20.2	93
2019	26.9	124
2018	21.5	99
2017	25.9	120
2016	17.8	82
2015	11.9	55
1977	7.8	36

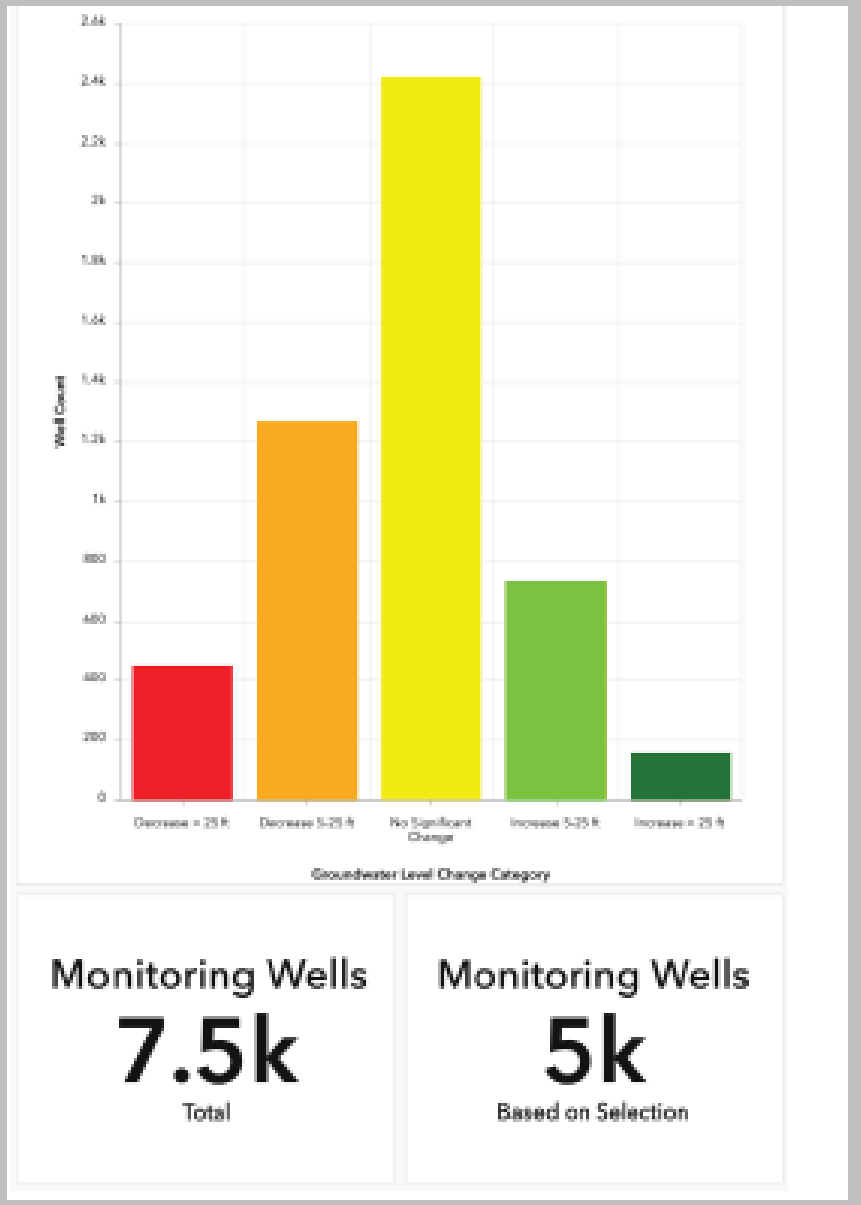

Groundwater Level Conditions
2022 and 2023 Measurements
All Time High
Much Above Normal
Above Normal
Normal
Below Normal
Much Below Normal
All Time Low
County
Groundwater Basin

1-Year & 3-Year Water Level Changes



Monitoring Wells
7.5k
Total

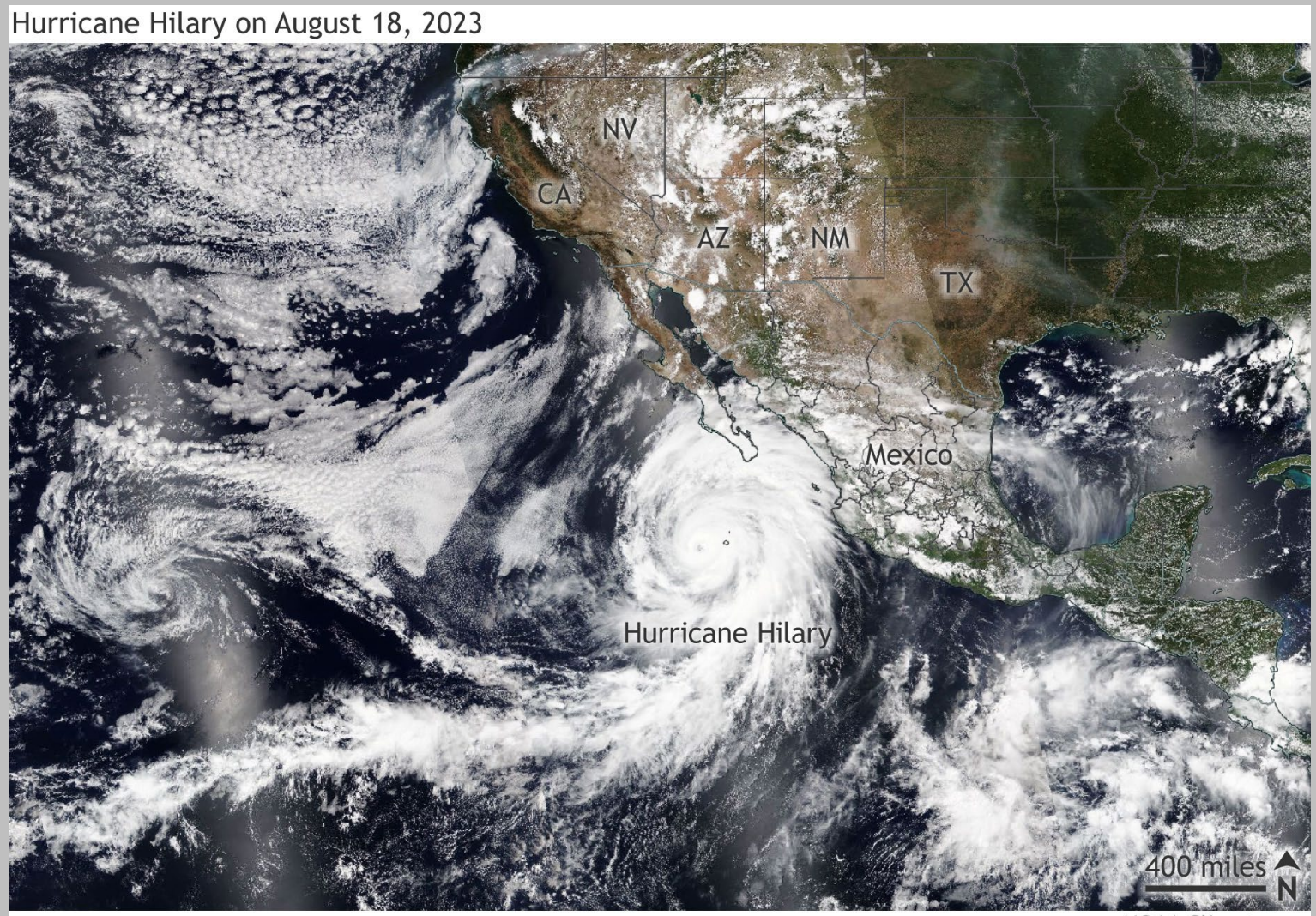
Monitoring Wells
6.3k
Based on Selection



Monitoring Wells
7.5k
Total

Monitoring Wells
5k
Based on Selection

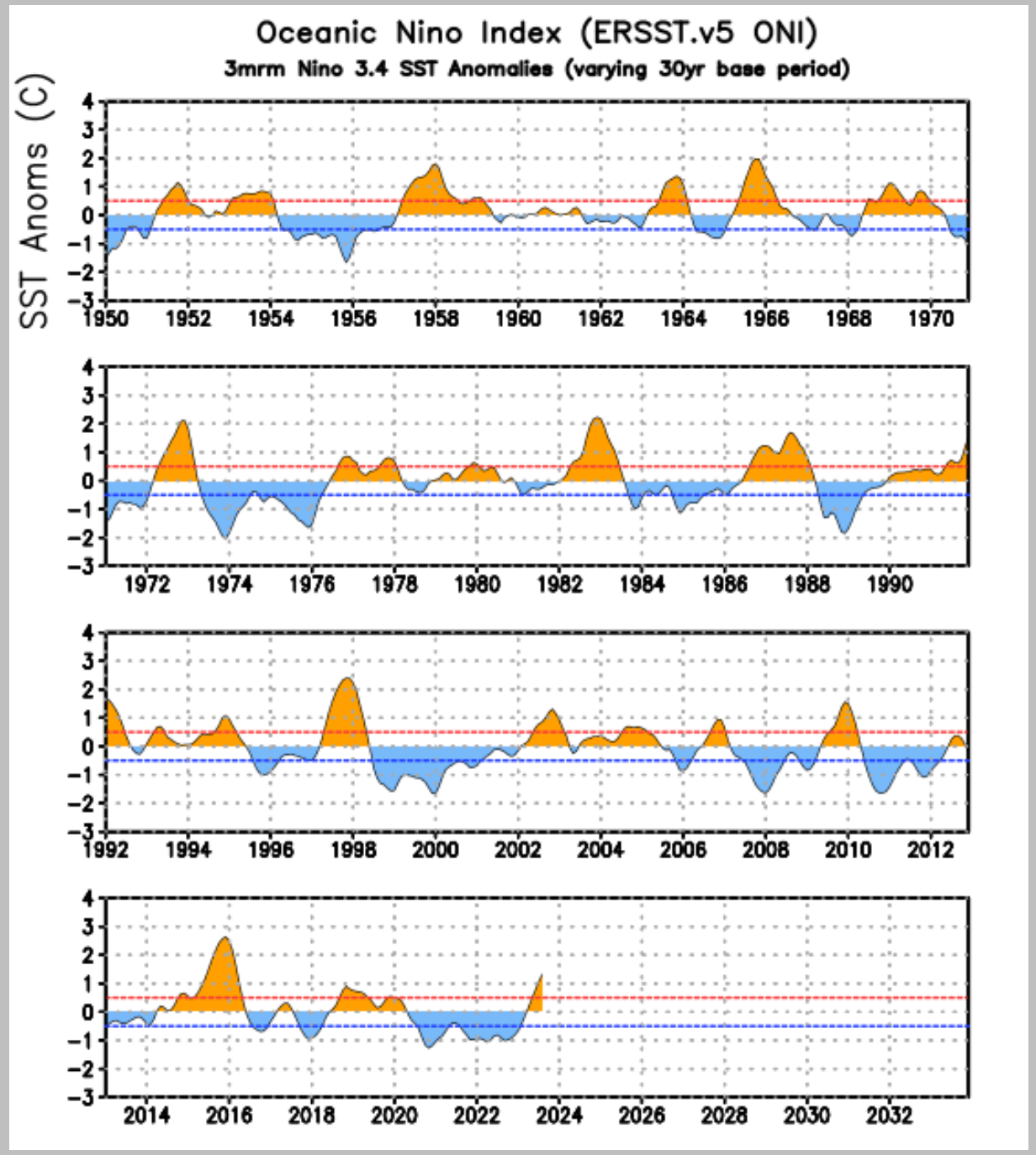
Tropical Storm Hillary in August



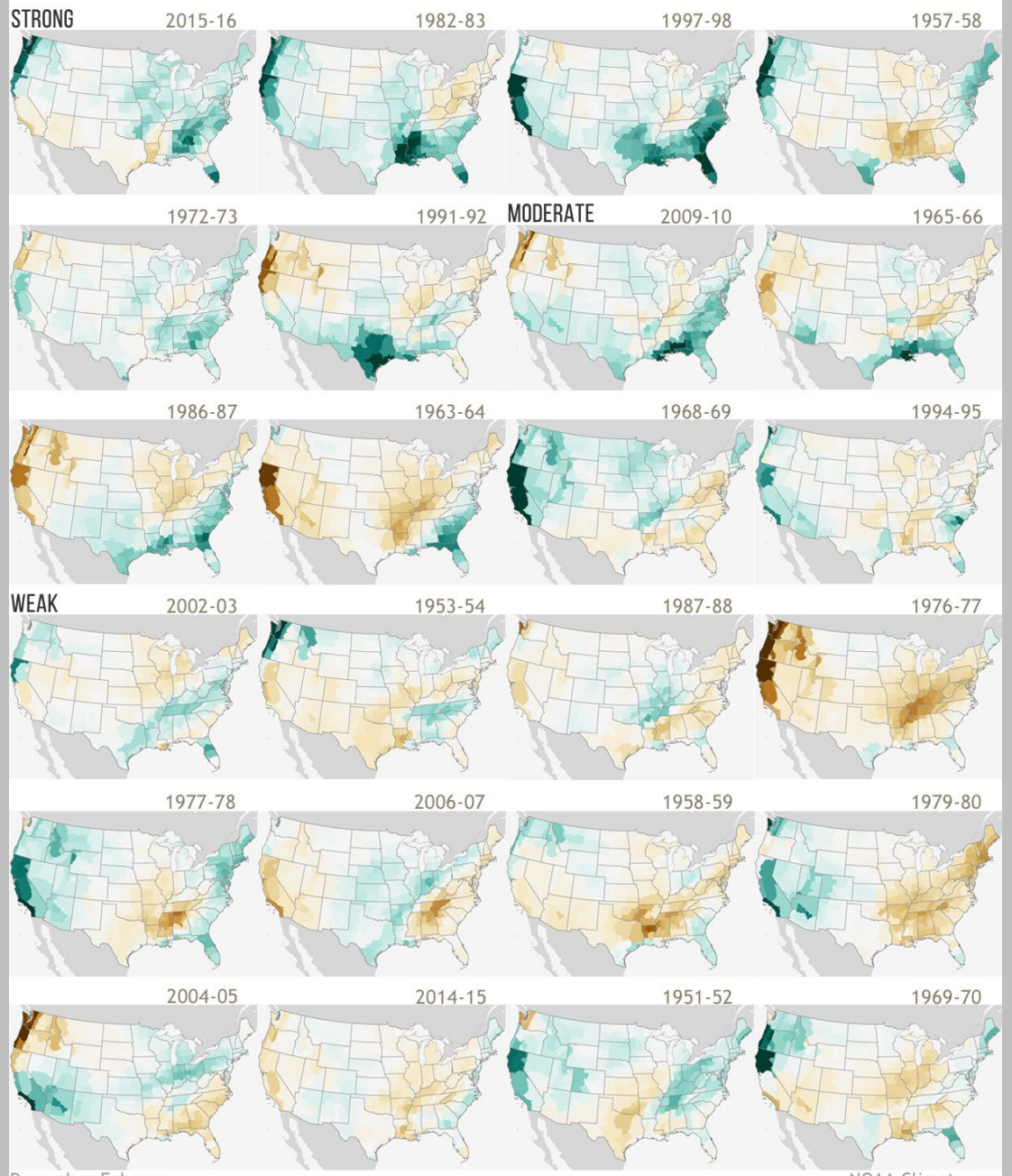
El Niño

Neutral

La Niña



U.S. winter precipitation during every El Niño since 1950



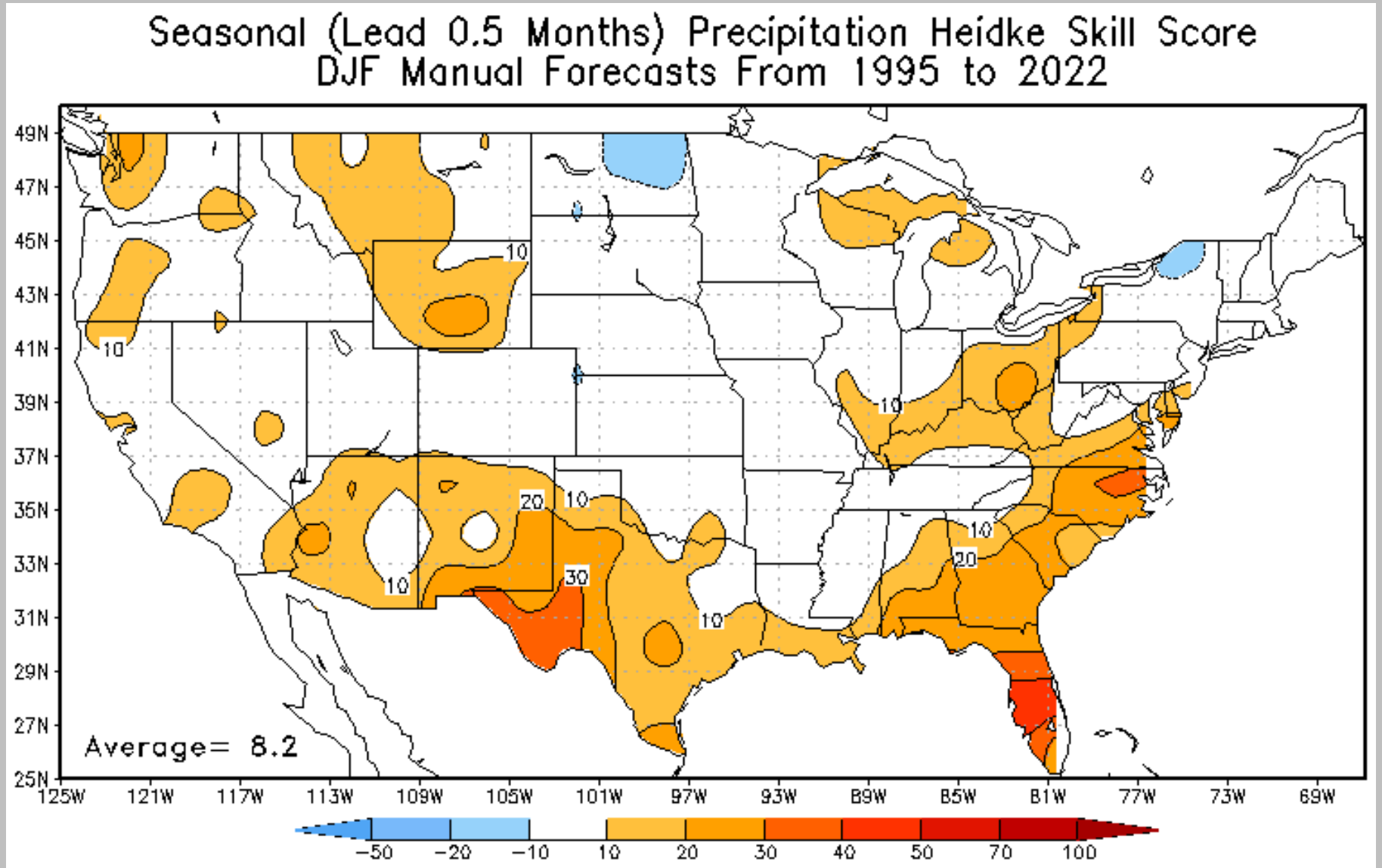
December-February
compared to 1981-2010

difference from average precipitation (in)

-12 0 12

NOAA Climate.gov
Data: ESRL/NCEI

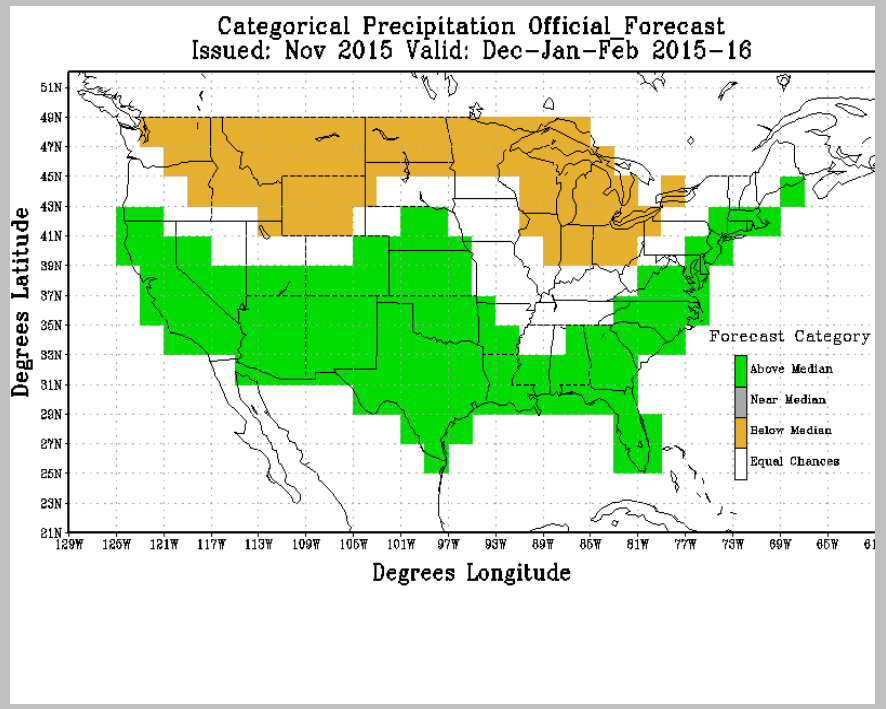
Historical Skill of NOAA Seasonal Outlooks – Not Usable for Water Management

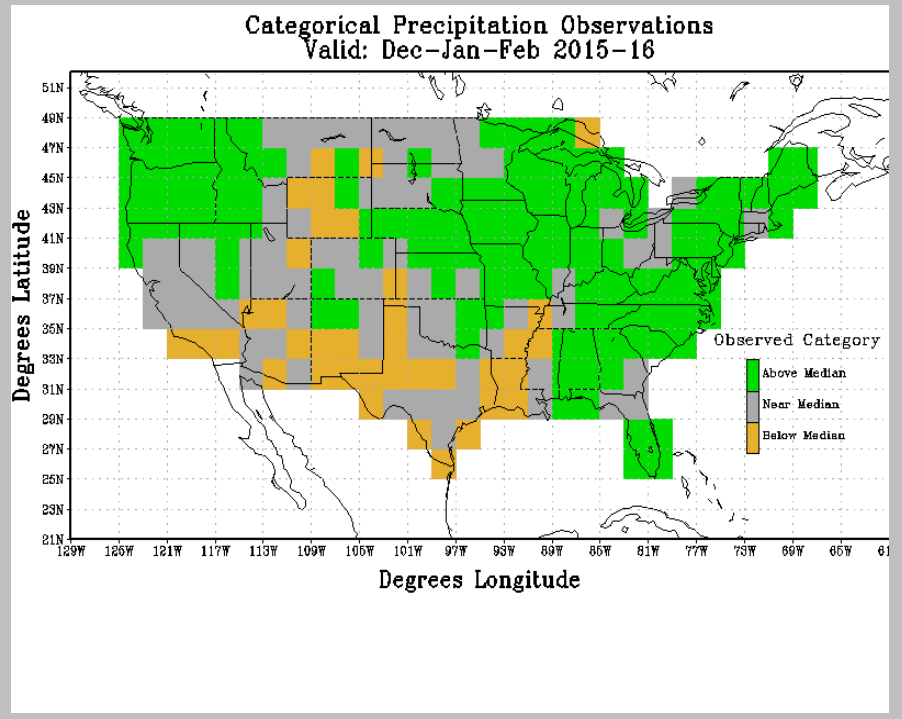


Seasonal Weather Predictions Are Elusive in California

- PPIC blog post October 16th: https://www.ppic.org/blog/seasonal-weather-predictions-are-elusive-in-california/?utm_source=rss&utm_medium=rss&utm_campaign=seasonal-weather-predictions-are-elusive-in-california?utm_source=ppic&utm_medium=email&utm_campaign=blog_subscriber
- Describes paper by Xianan Jiang (UCLA), seasonal precipitation fprecasting research funded by DWR under a NASA contract
- "…although we can relatively skillfully predict tropical sea surface temperatures over the eastern Pacific several months ahead, this surface temperature variability only explains about 25% of the year-to-year variability in California's precipitation. The rest is largely determined by circulation patterns independent of ENSO."

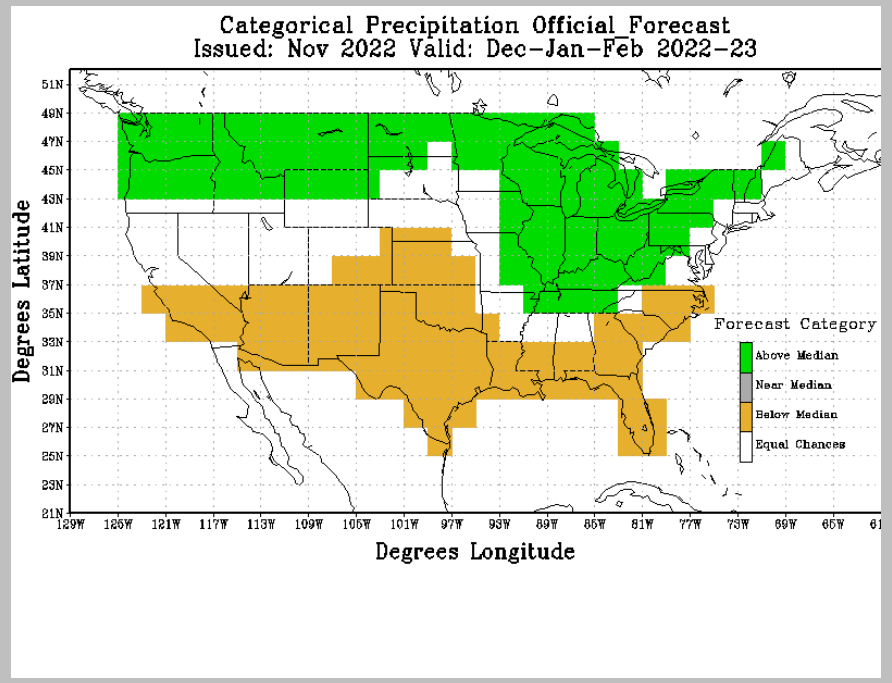
Water Year 2016, Year 5 of California's Prior Drought

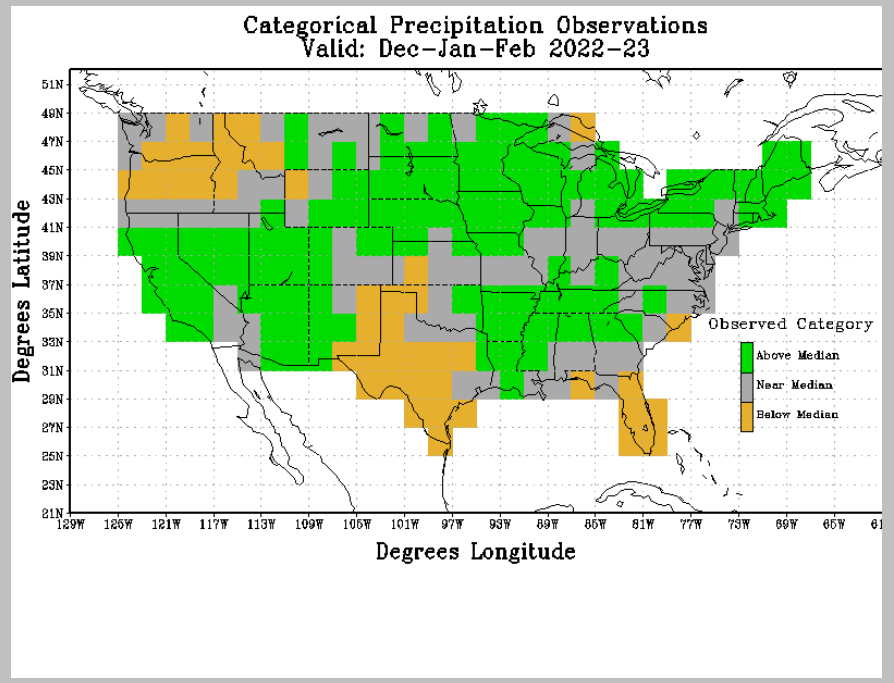




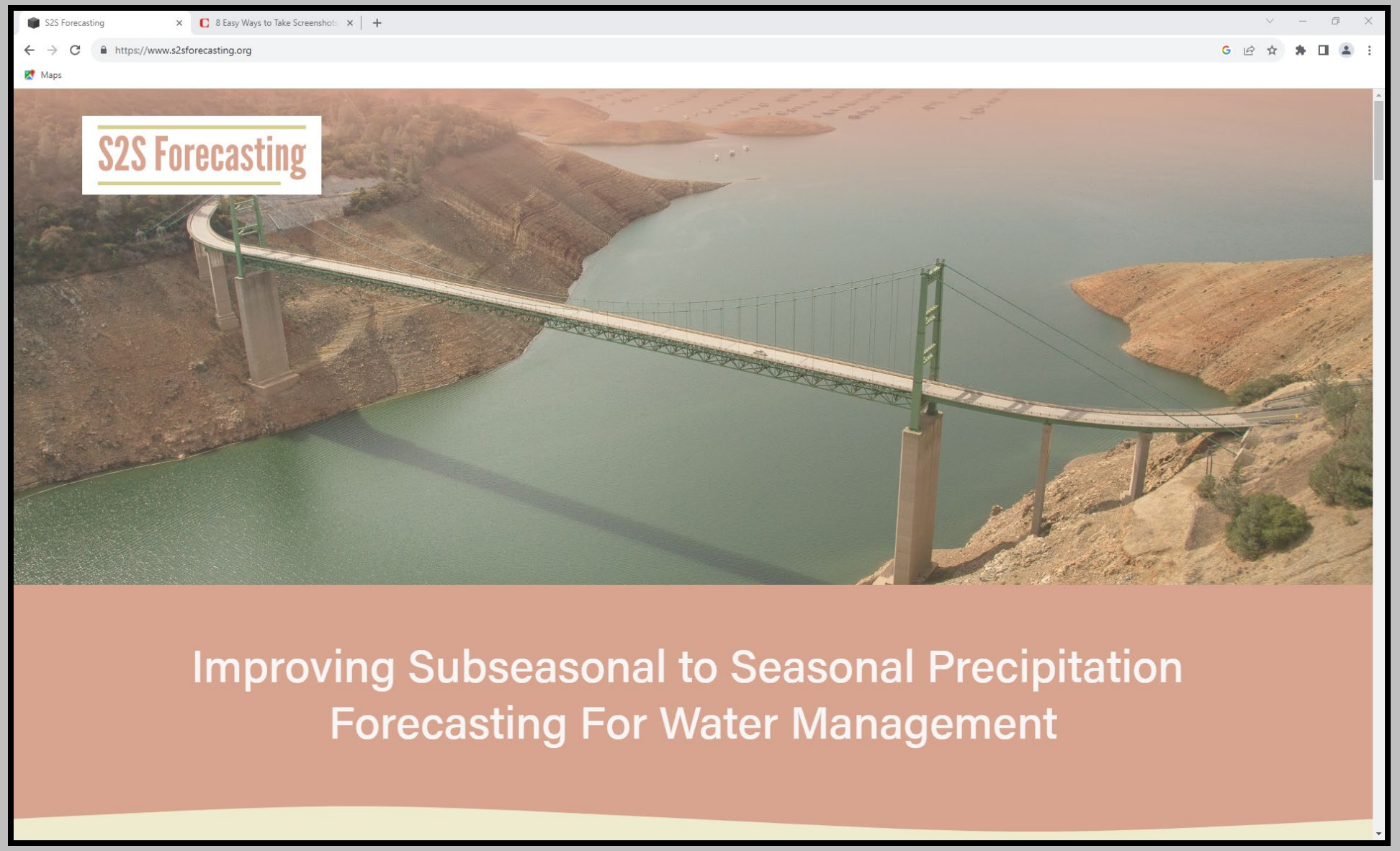
Remember the Godzilla El Niño?
(one of the strongest on record)

Last Winter's Weather Whiplash





S2Sforecasting.org



Sub-seasonal to Seasonal Precipitation Forecasting for Water Management

April 18, 2023

The Honorable Hal Rogers
Chairman
House Appropriations Subcommittee on
Commerce, Justice, and Science
United States House of Representatives
Washington, DC 20515

The Honorable Matt Cartwright
Ranking Member
House Appropriations Subcommittee on
Commerce, Justice, and Science
United States House of Representatives
Washington, DC 20515

Dear Chairman Rogers and Ranking Member Cartwright:

On behalf of the below-signed water management agencies and organizations, we are writing to request your support for a $15 million Fiscal Year 2024 (FY24) appropriation to support the pilot for improving sub-seasonal to seasonal (S2S) precipitation forecasting in the western U.S. The National Oceanic and Atmospheric Administration's (NOAA) 2020 report to Congress under Public Law 115-25 recommended the creation of this pilot project.

The purpose of the pilot project is to improve precipitation forecasting for water management in the U.S. As the report notes, NOAA pilot projects were chosen "*…based on the existence of major climate phenomena that have huge economic impacts and for which current S2S predictive skill is too low to be effectively used by many stakeholders.*"

For many decades the scientific community has not been able to offer dependable forecasts beyond a week or two, and S2S forecasts have the ability to provide state and local water managers with reliable extended precipitation outlooks. These sub-seasonal (2- to 6-week) to seasonal (2- to 12-month) projections fill an important gap between weather and climate forecasting and represent a central component of seamless short-term and long-term predictions that are needed to support water project operations, drought preparedness and response, and innovative water management strategies such as forecast-informed reservoir operations.

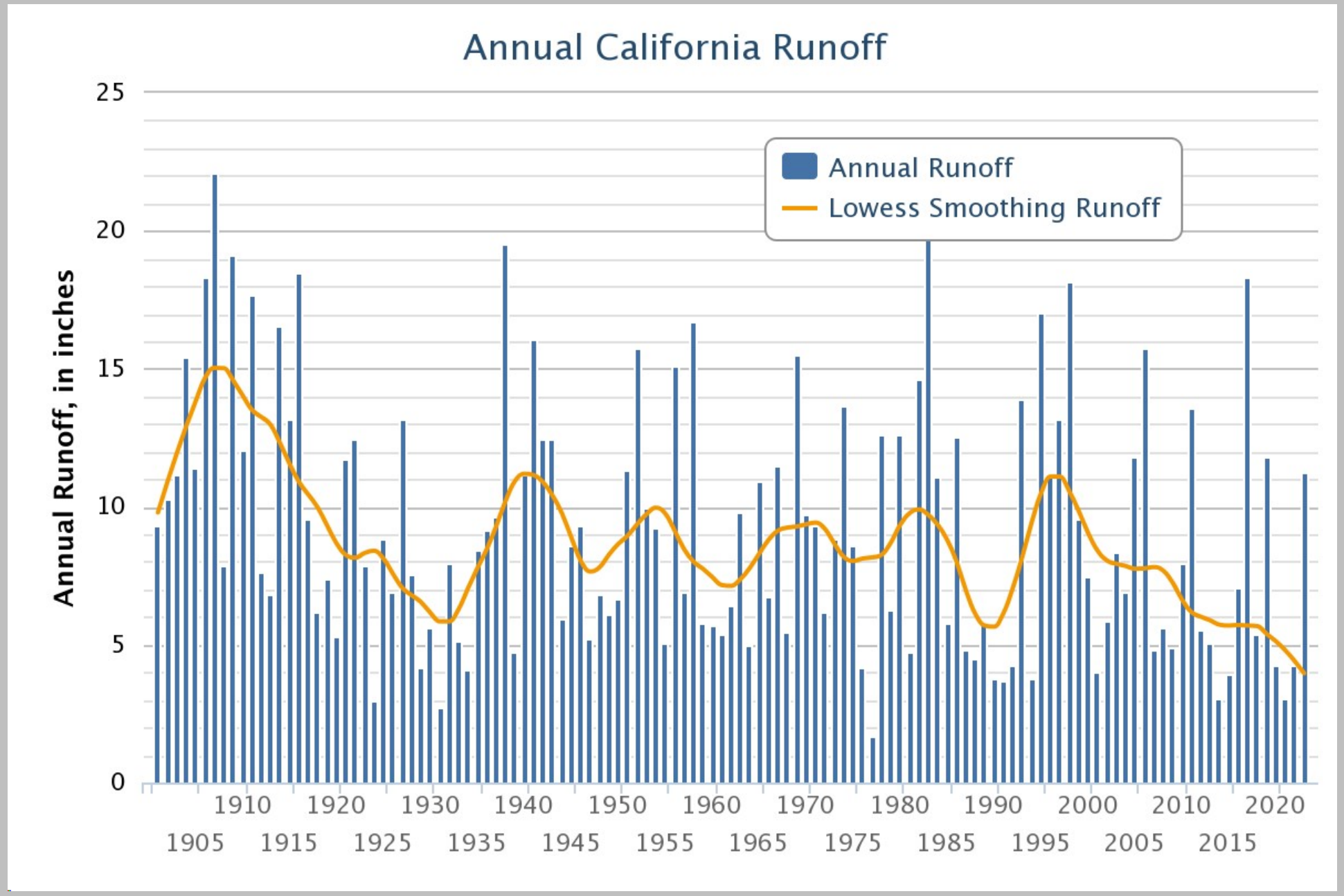
NOAA's Climate Prediction Center (CPC) has been issuing S2S precipitation outlooks since the mid- 1990s. Their skill for the western U.S. has been minimal, just slightly better than predicting average weather conditions, and has shown little improvement over time. Forecasting precipitation at S2S timescales is scientifically challenging and has historically received little federal research funding support.

Your support for a $15 million increase in the U.S. Weather Research Program line item within NOAA's Office of Oceanic and Atmospheric Research (OAR) would begin development of reliable forecasting with longer lead times to provide water managers with critical data to operate infrastructure more efficiently and allocate resources to mitigate and manage impacts of extreme wet and dry conditions. From this amount, we support a FY24 allocation of $3 million for the Weather Program Office (WPO) for grants, $4 million to the OAR Labs for product development, $2 million to the National Weather Service (NWS) CPC for product evaluation and implementation, $2 million to the NWS Environmental Modeling Center (EMC) for implementation and evaluation of model improvements, and $4 million for computing resources needed to support the federal efforts at OAR and NWS. The attached proposed committee report language describes how we believe this critical funding should be focused.

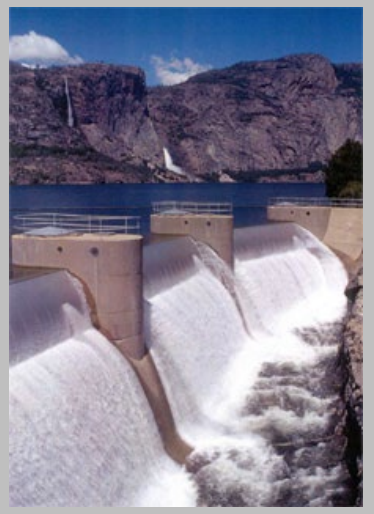
We appreciate your consideration and hope you will support S2S pilot project funding in FY24. Please contact Jordan Smith at jas@vnf.com with any questions or to schedule a meeting to discuss this project with your staff.

Sincerely,

Signature Page Follows


Annual California Runoff
Annual Runoff
Lowess Smoothing Runoff
Annual Runoff, in inches
25
20
15
10
5
0
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
2020
1905
1915
1925
1935
1945
1955
1965
1975
1985
1995
2005
2015

1920s-30s – A Time of Water Project Planning AND Most Severe Drought Conditions in Historical Record



Julie Ekstrom, CA Department of Water Resources

INFORMATIONAL ITEM 2

STATUS REPORT: SB 552 COUNTY TASK FORCES & DROUGHT RESILIENCE PLANS

California
DRIP Collaborative

Status Report on SB 552 County Task Forces

Known to date

County Drought Task Forces

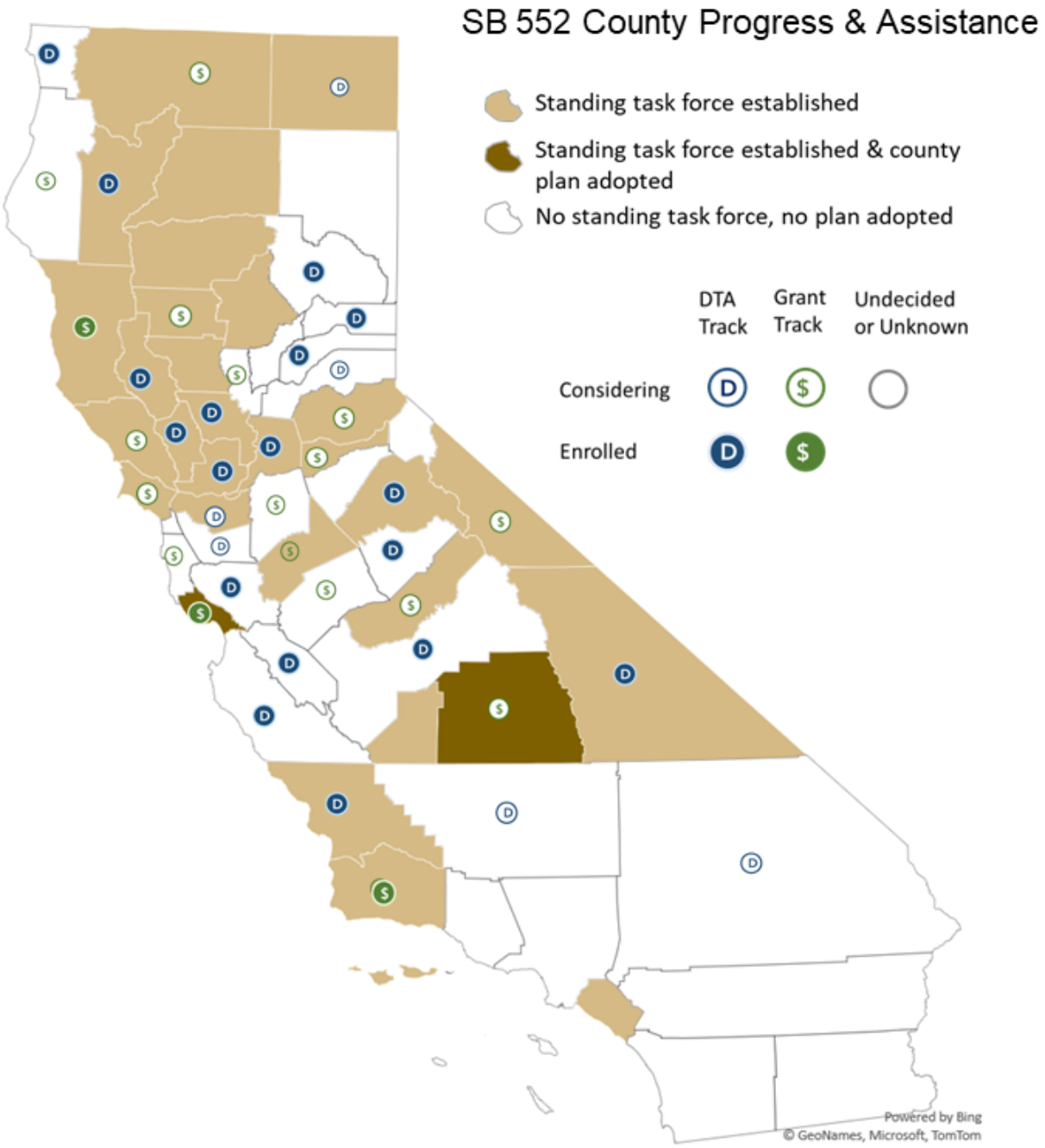
- 27 out of 58 counties (47%)

County Drought Resilience Plans

- 2 adopted out of 58 counties

State Planning and Task Force Assistance:

- 19 applied in Direct Technical Assistance
- 3 applied for grants



California DRIP Collaborative

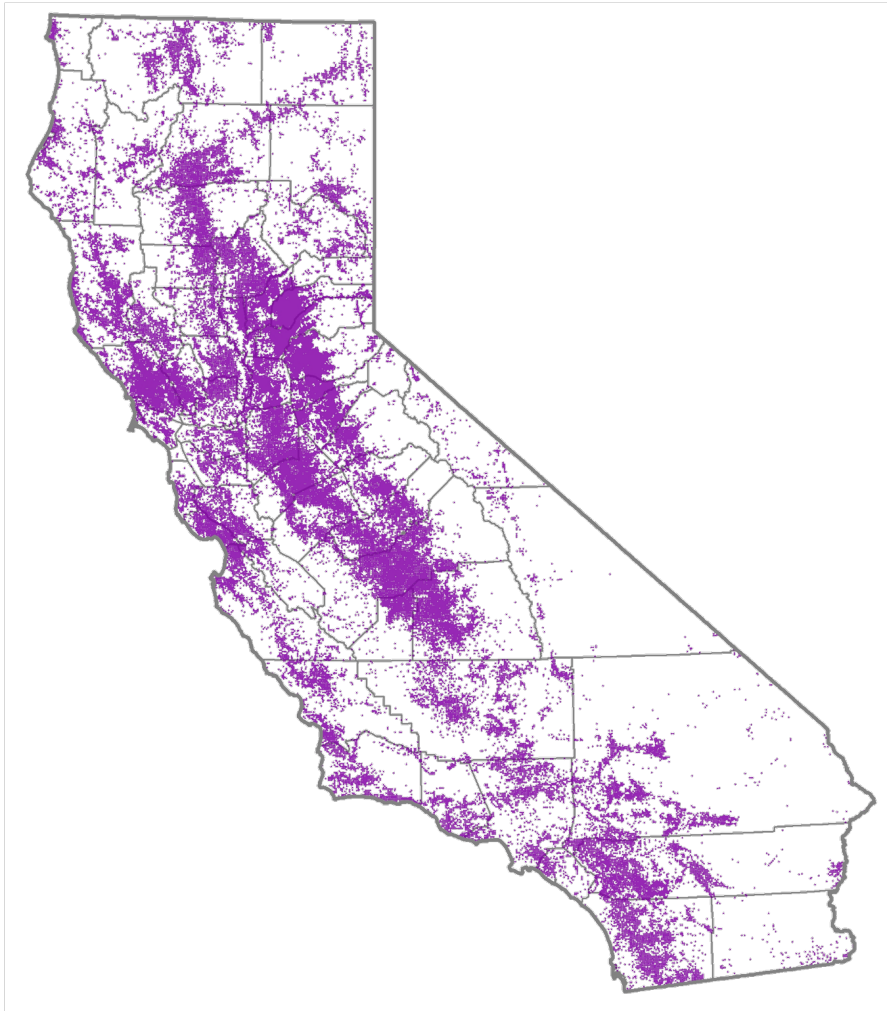
Ben Brezing, CA Department of Water Resources

INFORMATIONAL ITEM 3

UPDATE ON DOMESTIC WELL DATA

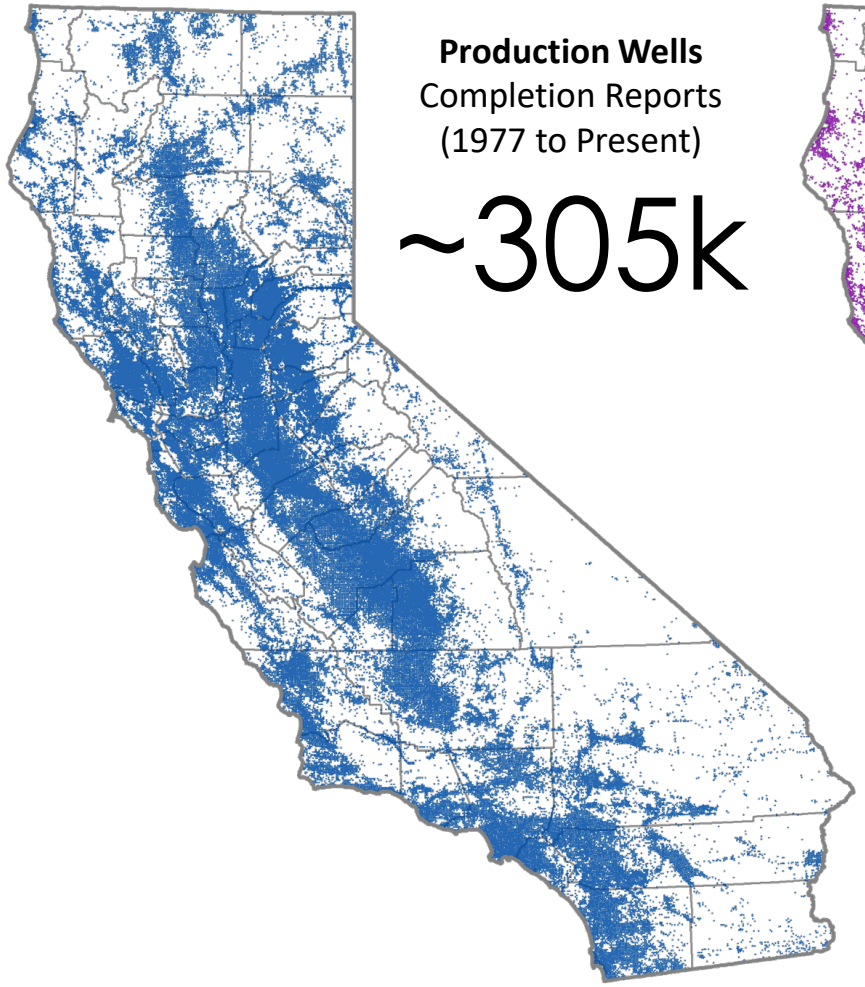
California
DRIP Collaborative

Inventory of Domestic Wells



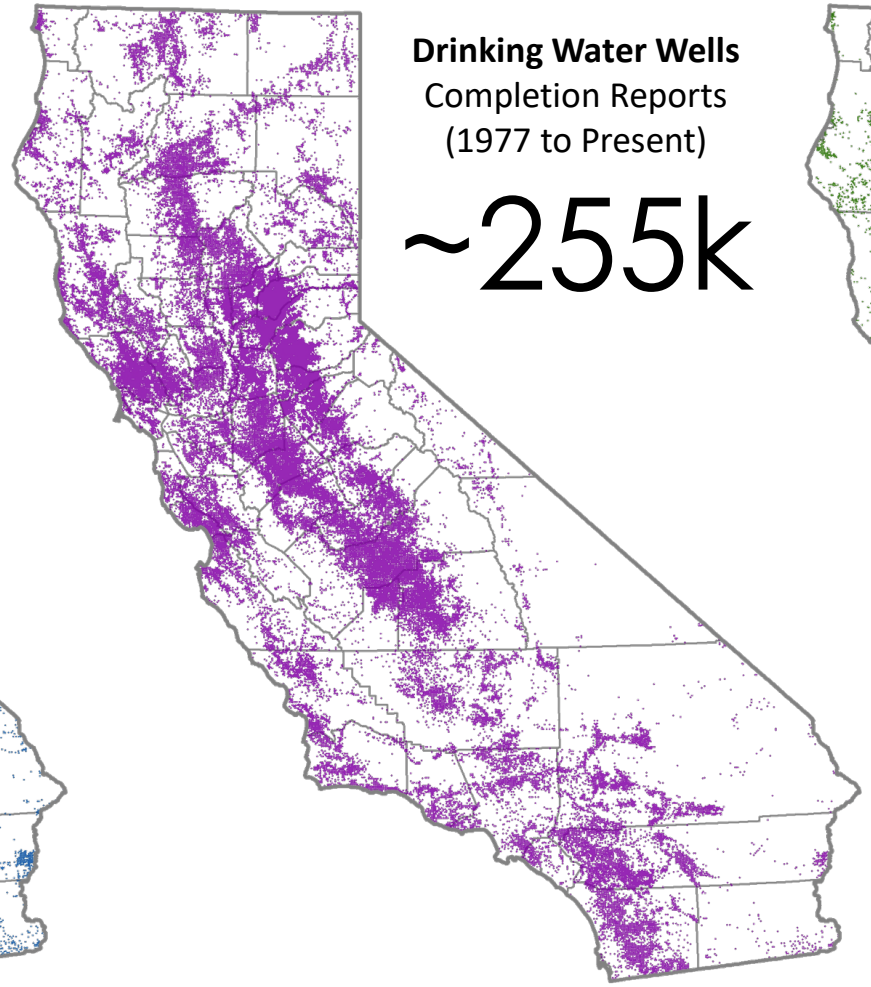
- **Problem**: In California today, there is no legislative directive or dedicated funding to create and maintain a statewide well inventory. However, several efforts have created a patchwork of domestic well datasets that are not necessarily aligned nor connected to one another
- **Relevance to Drought**: Domestic wells are highly vulnerable to drought. A maintained and consistent, publicly available inventory will help the State and local governments understand the extent of vulnerabilities, plan resources for those at risk, and be able to more proactively prepare outreach and education to reduce risks of outage.

Inventory of Domestic Wells



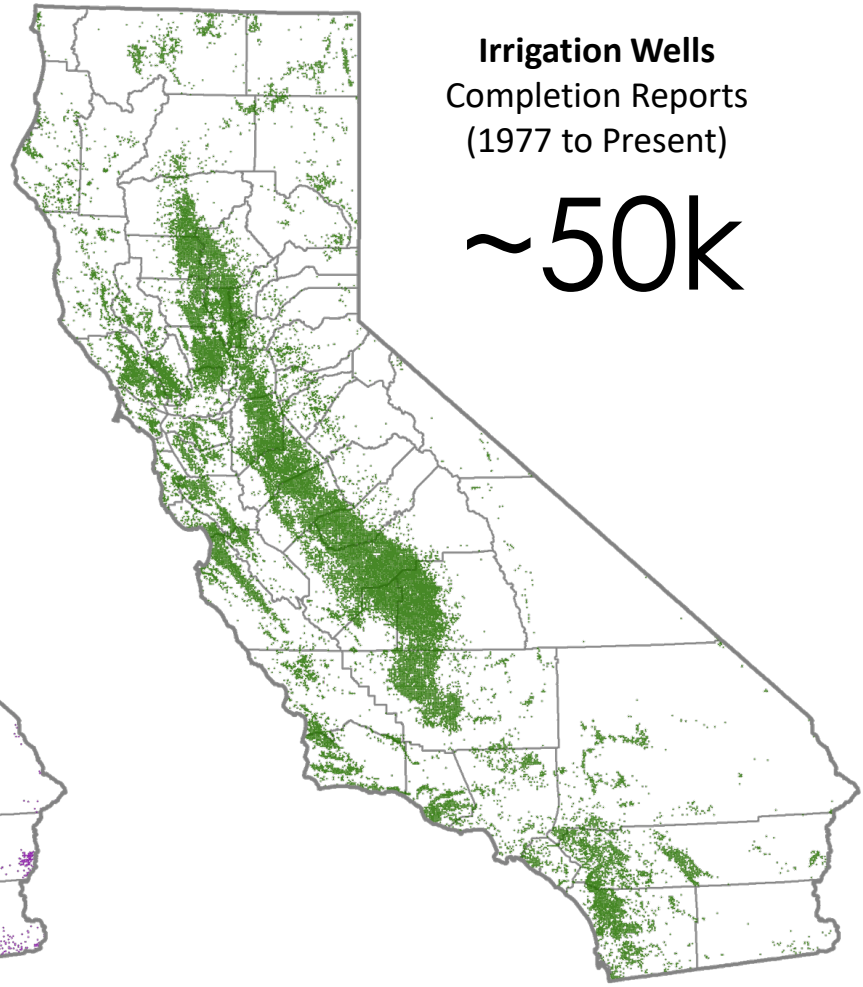
Production Wells
Completion Reports
(1977 to Present)

~305k



Drinking Water Wells
Completion Reports
(1977 to Present)

~255k



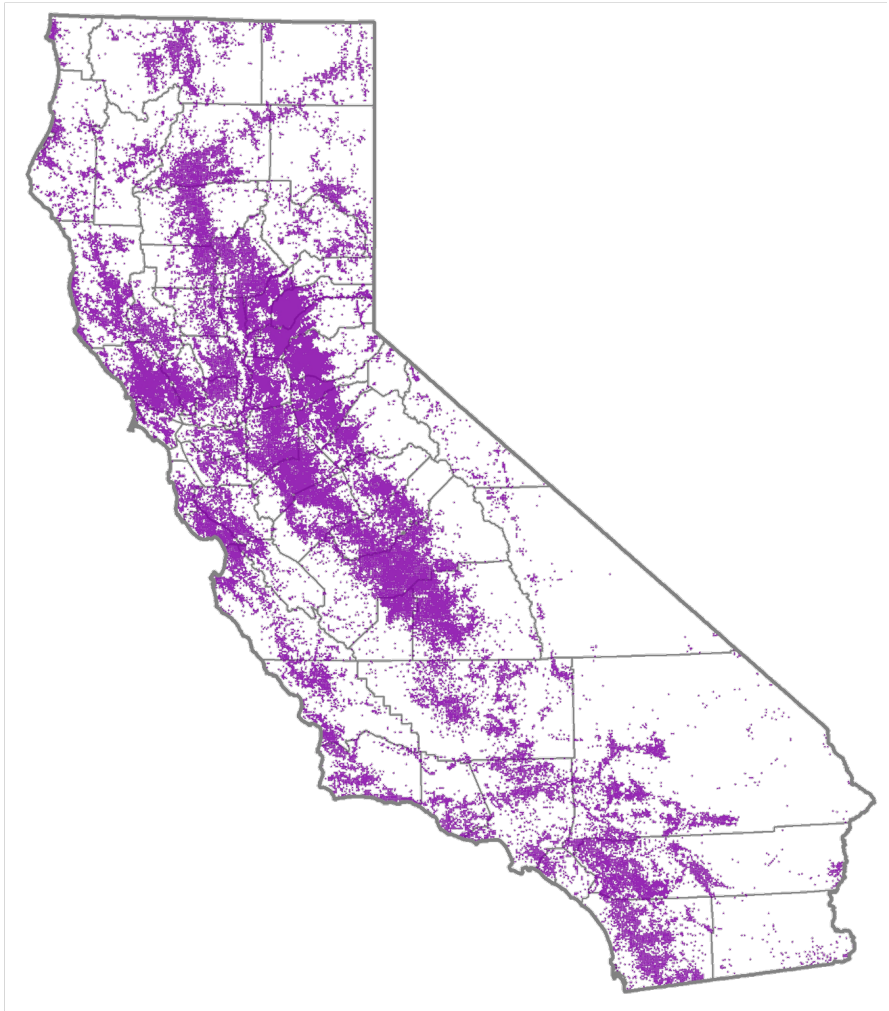
Irrigation Wells
Completion Reports
(1977 to Present)

~50k

DWR's Well Completion Reports: https://water.ca.gov/Programs/Groundwater-Management/Wells/Well-Completion-Reports

Data available on CNRA Open Data: https://data.cnra.ca.gov/dataset/well-completion-reports

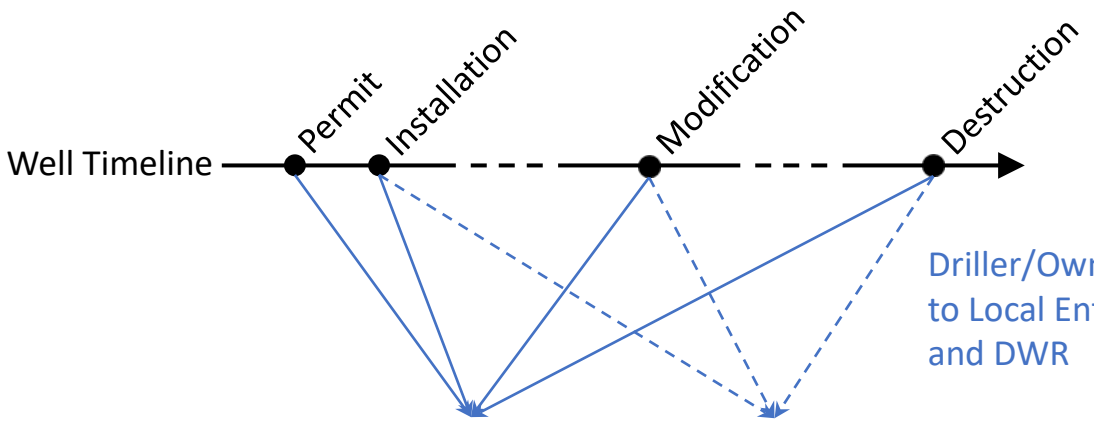
Well Inventories and Data Reporting



Existing efforts related to well inventories (incomplete list)

Program	Host
Well permitting	Counties, Cities, Water Districts
Online System for Well Completion Reports (OSWCR)	DWR
Local Well Inventories	Counties/GSAs
Dry well reporting system	DWR
Groundwater Ambient Monitoring and Assessment - Groundwater Information System (GAMA GIS)	SWB (USGS, CDPR…)
California Statewide Groundwater Elevation Monitoring (CASGEM)	DWR
Safe and Affordable Funding for Equity and Resilience (SAFER)	SWB
Drinking Water Tool	CWC

Well Inventories and Data Reporting



Driller/Owner reporting
to Local Enforcement Agencies
and DWR

Photo of Oregon Well Identification Program Label

Permit #, APN

Well Permitting Records
(Counties)

WCR #, Permit #, SWN, CASGEM Site Code, APN, Location, Owner

Well Completion
Report Database
(DWR)

Local Well Inventories
(Counties, GSAs)

Field Verification

Related Well Data Program Examples - **Program Well Identifier**(s)

- CASGEM (DWR) - **Site Code**, SWN, WCR #
- GAMA (SWB) - **GAMA Well ID** (SWN, PWS Code)
- SAFER (SWB) - **PWS Code**, WCR #
- Dry Wells (DWR) - **Location**

Clare Keating & Sam Magill, DRIP support team

INFORMATIONAL ITEM 1

INFORMATIONAL 101 SERIES

California
DRIP Collaborative

Informational 101 Series

Based on input and interest, The DRIP support team will facilitate member-initiated informational sessions.

Potential topics:

- Groundwater recharge (Flood-MAR)
- In-stream flows
- Groundwater banking
- Recycled water
- California Water Watch: localized drought conditions
- Water law
- Water systems
- Nature based solutions
- Climate change and water impacts

Any experts in the room? Are you or is someone in your network a subject matter expert on any of these topics? Please reach out to the support team after this meeting or by email to drip@water.ca.gov if you would like to be involved.

Action Items & Next Steps

California
DRIP Collaborative

Closing Comments

California
DRIP Collaborative

California
DRIP Collaborative

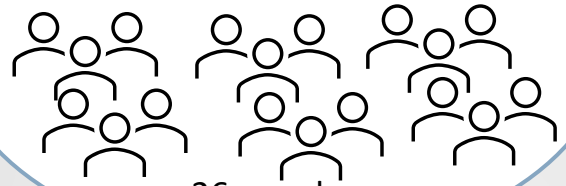
Adjourn

Thank you!

DRIP Collaborative Structure

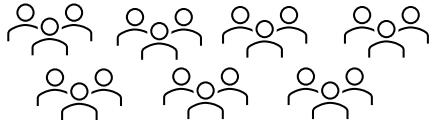
Interagency & Partners Collaborative

1

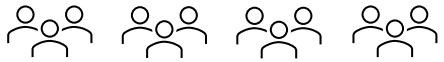


26 members

2 Network of state agency and other experts for presentations on topics



3 Ad hoc Work Groups may be requested by Task Force, as needed. No permanent Work Group structure.



4

Annual Summary

Annual update on state drought program accomplishments, challenges, and recommendations to support proactive planning and response for drought

Agency Secretaries & Governor's Office

5 **Regular annual schedule**
(drought & non-drought years)

Spring
Summer
Fall

CALIFORNIA DEPARTMENT OF WATER RESOURCES

State Agency Members

State Agency	Delegate
CA Natural Resources Agency	Nancy Vogel
Department of Water Resources	Karla Nemeth (Kris Tjernell)
CA Dept. of Fish and Wildlife	Josh Grover
California Environmental Protection Agency	Anna Naimark (Katy Landau)
State Water Board	Joaquin Esquivel (Andrew Altevogt)
CA Dept of Food and Agriculture	Virginia Jameson (Tawny Mata)
California Office of Emergency Services	Tina Curry (Lori Nezhura)
Governor's Office for Planning and Research	Saharnaz Mirzazad (Sam Assefa, Elea Becker, Ben McMahan)

State Agency Members: 1 representative each, alternate in parantheses

Non-State Membership

Tribal Representatives

Technical Assistance Provider*

Community-based Organizations*

The Public*

The Environment

Agriculture

Local Government*

Experts in Land Use/Water*

Public Water Systems

Name	Organization
Michael Gerace	Yurok Tribe
Emily Moloney	Buena Vista Rancheria of Me-Wuk Indians
Justine Massey	Community Water Center
David Michalko	California Association of Mutual Water Companies
Tami McVay	Self Help Enterprises
Grace Person	CivicWell
Suzanne Pecci	Domestic Well Planning Group South American Subbasin
Brent Hastey	Plumas Lake Self Storage, Owner
Anna Schiller	Environmental Defense Fund
Redgie Collins	California Trout, Inc.
Emily Rooney	Agricultural Council of California
Jason Colombini	Jay Colombini Ranch, Inc.
Catherine Freeman	California State Association of Counties
Sierra Ryan	Santa Cruz County
Alvar Escriva-Bou	University of California Los Angeles
Laura Ramos	California Water Institute at Fresno State
Russ Bryden	Los Angeles County Public Works
Katie Ruby	California Urban Water Agencies (CUWA)

Non-State Agency Members:
(18 total, 2 per category, asterisk * indicates category specified in Water Code)