3/19/2025

California County Café

– Specializing in Drought Resilience

Welcome and Setting Intention

Julia Ekstrom – California Department of Water Resources

On the Menu

Welcome and Setting Intention

- →The C3 Process – Reminder
- →Statewide SB 552 Status

Theme for Today: **Triggers for activating water shortage event actions**

- →Sharing and Discussion

Closing

The C3 Process

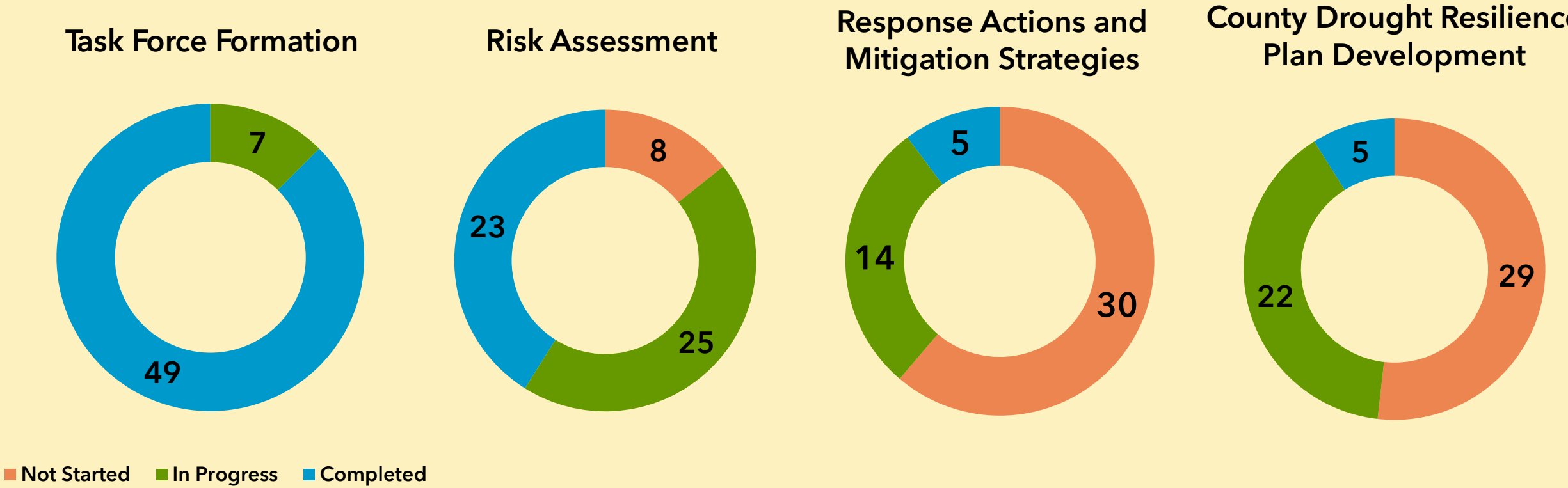
- **Desired outcome** – Network and exchange ideas and resources among counties.
  - Increase the understanding of SB 552 intent and requirements.
  - Learn about different implementation approaches, practices, and experience.
  - Compare identified resource needs and share funding opportunities.
  - Improve coordination with other agencies and interested parties.
- **Our format** – Information exchange among counties to share information and approach to SB 552 implementation. (Café gatherings and Office hours)
- **Intended audience** – County staff.

  Appreciate others listening in but focusing on staff who are responsible for developing the DRP and implementing.

Essentials of the C3 Gathering

- ✓Join the conversation – share your experience and learn from other perspectives and experiences.
- ✓Make a connection – use the chat to connect with other participants.
- ✓County focused – While all are invited to join, this gathering will focus on supporting county staff.

Statewide SB 552 Status



Source: 3/6/2025 data based on input from 56 counties enrolled in DWR's assistance program. Exclusions: The City and County of San Francisco are covered by other requirements, and one has not enrolled in DWR's assistance program.

Triggers for activating water shortage event actions

Orit Kalman - Facilitator

What You Shared in the Survey:

What information do you use to inform your short-term water shortage planning?

PAST EXPERIENCE

- Historical occurrences of water shortages

LOCAL PARTNERS

- Defer to local water agencies / Environmental Health
- Lean on County OES information
- Local GSA well data

RELATED PLANNING EFFORTS

- County plans
- Risk assessment and corresponding resources
- Local Hazard Mitigation Plan

STATE TOOLS AND DATA

- CA state water databases/webtools
- State data tools
- Aquifer Risk Map

OTHER INFORMATION

- Agency data
- Water condition metrics
- Drinking Water mitigation template
- Updates from community members
- CWC drinking water tool and

Determination of Water Shortage Stage

HYDROLOGY CONSIDERATIONS

- US Drought Monitor: Updated weekly and classifies drought conditions across the United States into none, Abnormally Dry, Moderate, Severe, Extreme, and Exceptional.
- **GSA Monitoring:** GSAs in SGMA priority basins are required to do regular monitoring (typically in October and April) of groundwater conditions as part of their reporting.
- **Public Water System Water Shortage Stage:** A Public Water System is required to maintain a Water Shortage Contingency Plan (or have one within an Urban Water Management Plan) that specifies stages of water shortage tied to projected water supply shortfalls.

WATER QUALITY CONSIDERATIONS

- **Water Quality Monitoring:** The presence of potential water quality issues that may result in water supplies being unusable can be used to establish a water shortage stage.
- **Disasters:** Hazards such as earthquake, avalanche, landslide, wildfire can exacerbate poor water quality conditions.

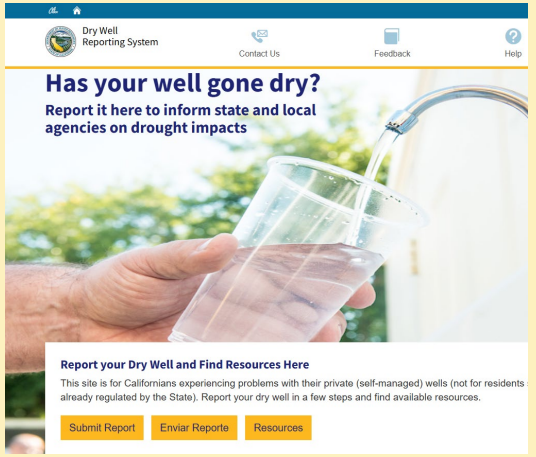
INFRASTRUCTURE CONSIDERATIONS

- **Applications for New Well Permits:** An increase in new well permit applications (both domestic and others) to replace existing wells that are not providing sufficient water supply.
- **Applications for deepening existing wells**
- California Dry Well Reporting System: California has a dry well reporting system that well owners or operators can use to report a dry well.

California Dry Well Reporting System

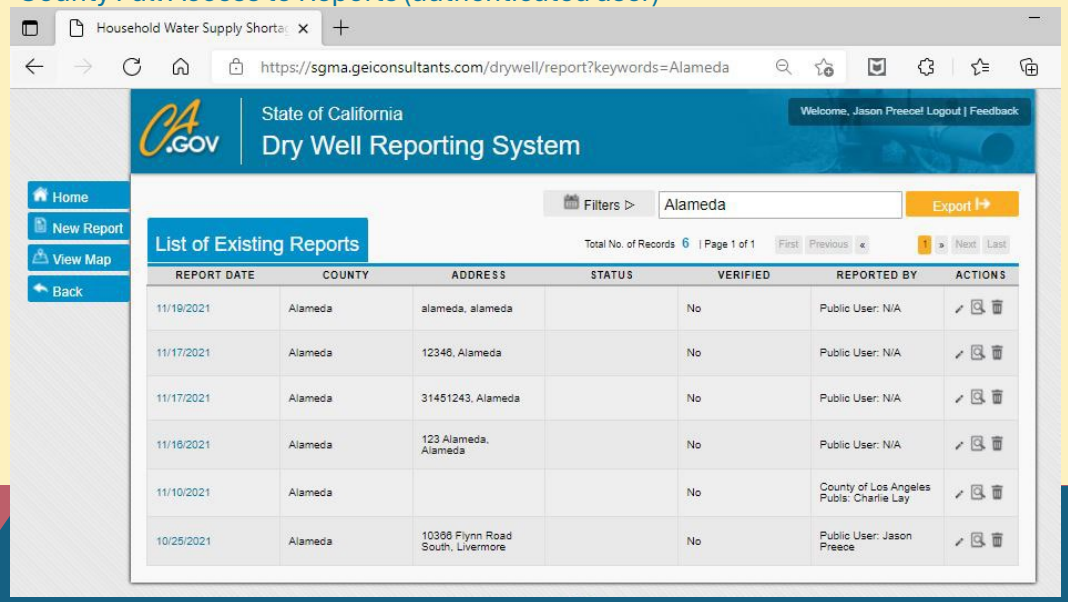
- **What is it:** State-operated, but local government available, online system that keeps track of dry well reports; county POC can get an account to submit and access reports for its county
- **Why is it important:** Planning, communication, and response
- **How to get a county account set up?** One point person per county; send request for account to Jason.Preece@water.ca.gov or CountyDRP@water.ca.gov
- **How to access it?** https://mydrywatersupply.water.ca.gov/ - sign in after you get an account.
- **How to message it to community members?** Offer reporting as a way to inform the county staff and your task force about a dry well. Post on your webpage.
- **What information is collected?** Contact information (redacted), issue and location, well log data (optional), reported by
- **How the information is being used?** Redacted version of data made public in real-time; Provides early signaling to State when clusters of wells are going dry to help State understand hotspots of drought impacts or other dewatering situations. Accounted for as indicator in Water Shortage Vulnerability Scoring.

Public form



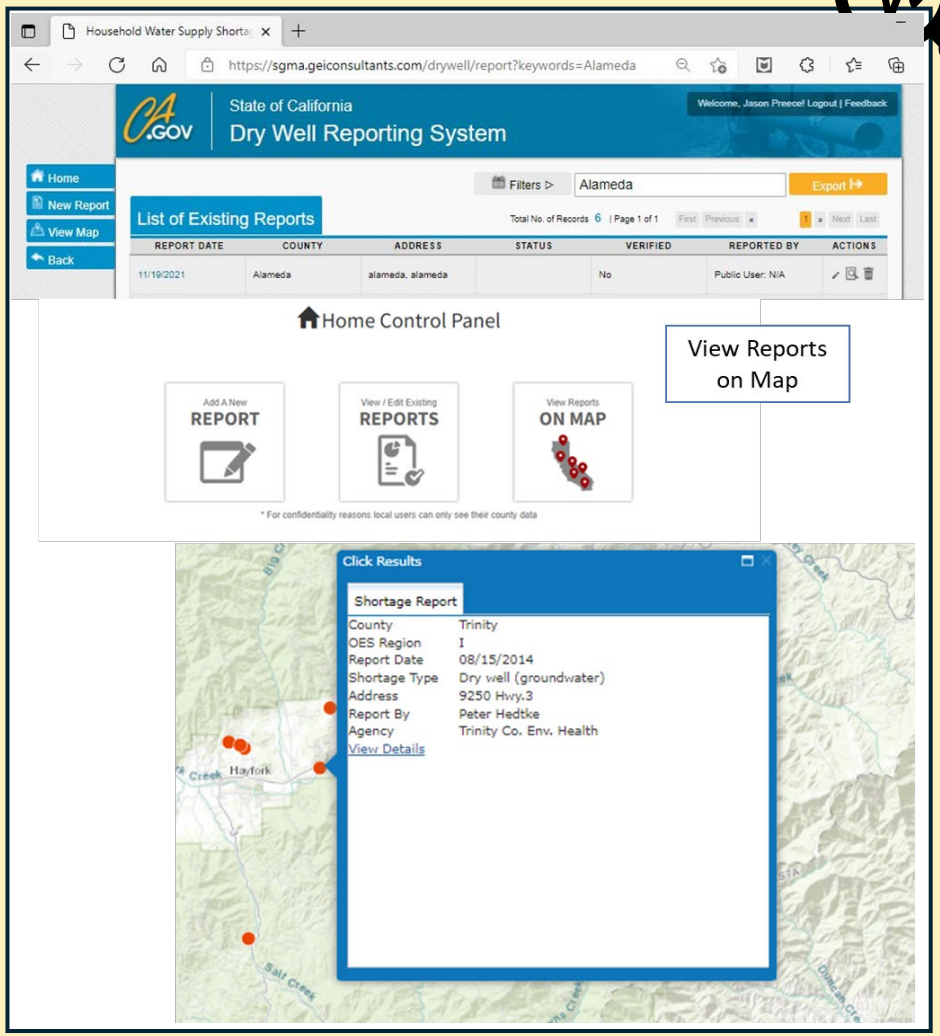
Outreach Information

County Full Access to Reports (authenticated user)



California Dry Well Reporting System

- **What is it:** State-operated, but local government available, online system that keeps track of dry well reports; county POC can get an account to submit and access reports for its county
- **Why is it important:** future planning and funding
- **How to get a county account set up?** One point person per county; send request for account to Jason.Preece@water.ca.gov or CountyDRP@water.ca.gov
- **How to access it?** https://mydrywatersupply.water.ca.gov/ - sign in after you get an account.
- **How to message it to community members?** Offer reporting as a way to inform the county staff and your task force about a dry well. Post on your webpage.
- **What information is collected?** Contact information (redacted), issue and location, well log data (optional), reported by
- **How the information is being used?** Redacted version of data made public in real-time; Provides early signaling to State and local agencies when clusters of wells are going dry to understand hotspots of drought impacts or other dewatering situations. Accounted for as indicator in Water Shortage Vulnerability Scoring.
    - Does not trigger funding.



County Approach to Defining Triggers

Lee Ann Hennessy - Sutter County

Tien Tran - Community Water Center

Amber Fisette (Amir Mani, EKI) - Mendocino County

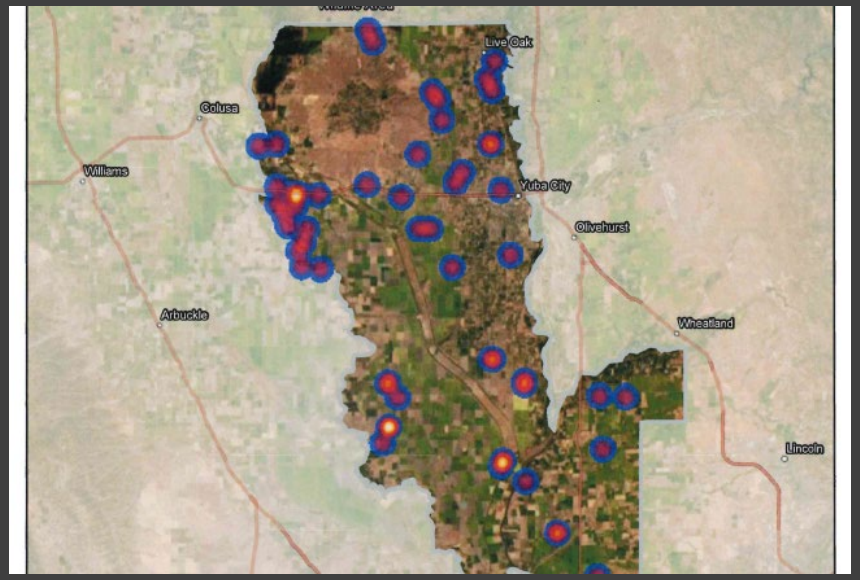
County of Sutter Drought Resiliency Plan

Office of Emergency Management

Historical Droughts

- 2021
- 2014
- 1976

Established in 1842, John Sutter’s Hock Farm was the first large-scale agricultural settlement in Northern California, composed of grain, cattle, orchards and vineyards. Sutter County became incorporated in 1850 as one of the original 27 counties in California.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Colusa
Williams
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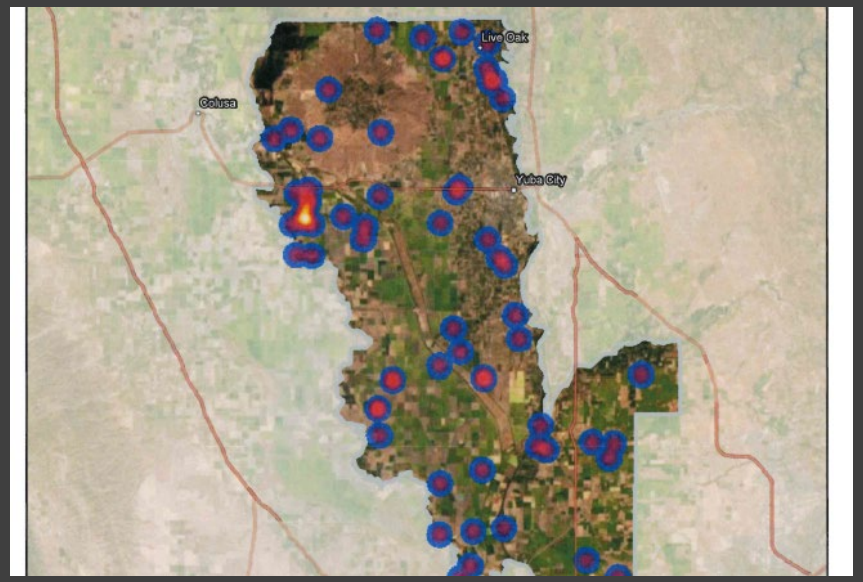
Olivehurst
Arbuckle
Wheatland
Lincoln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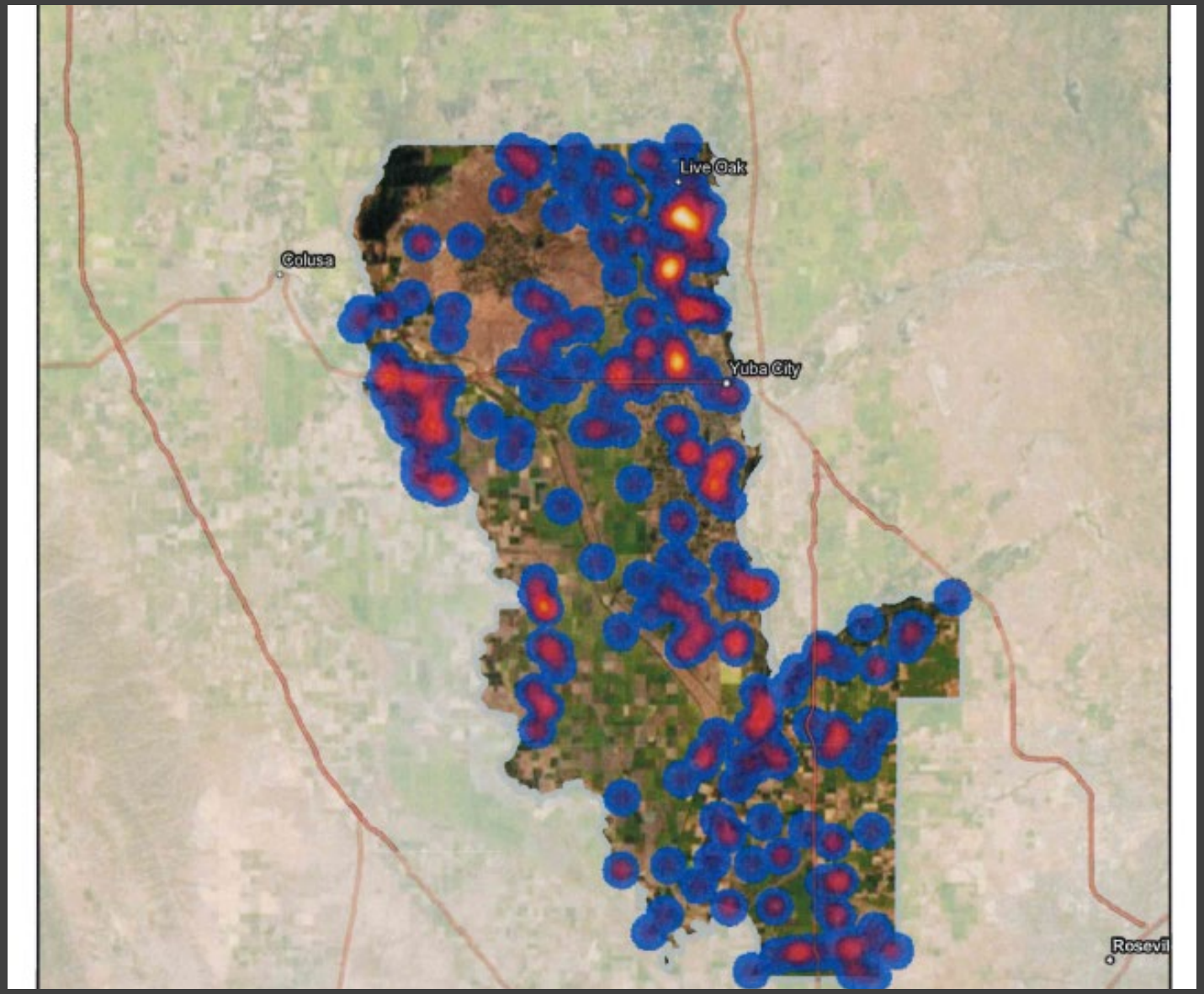

Live Oak
Colusa
Yuba City
Rosevil

SUTTER SUBBASIN
Groundwater Sustainability Plan

Sutter County
Operational Area

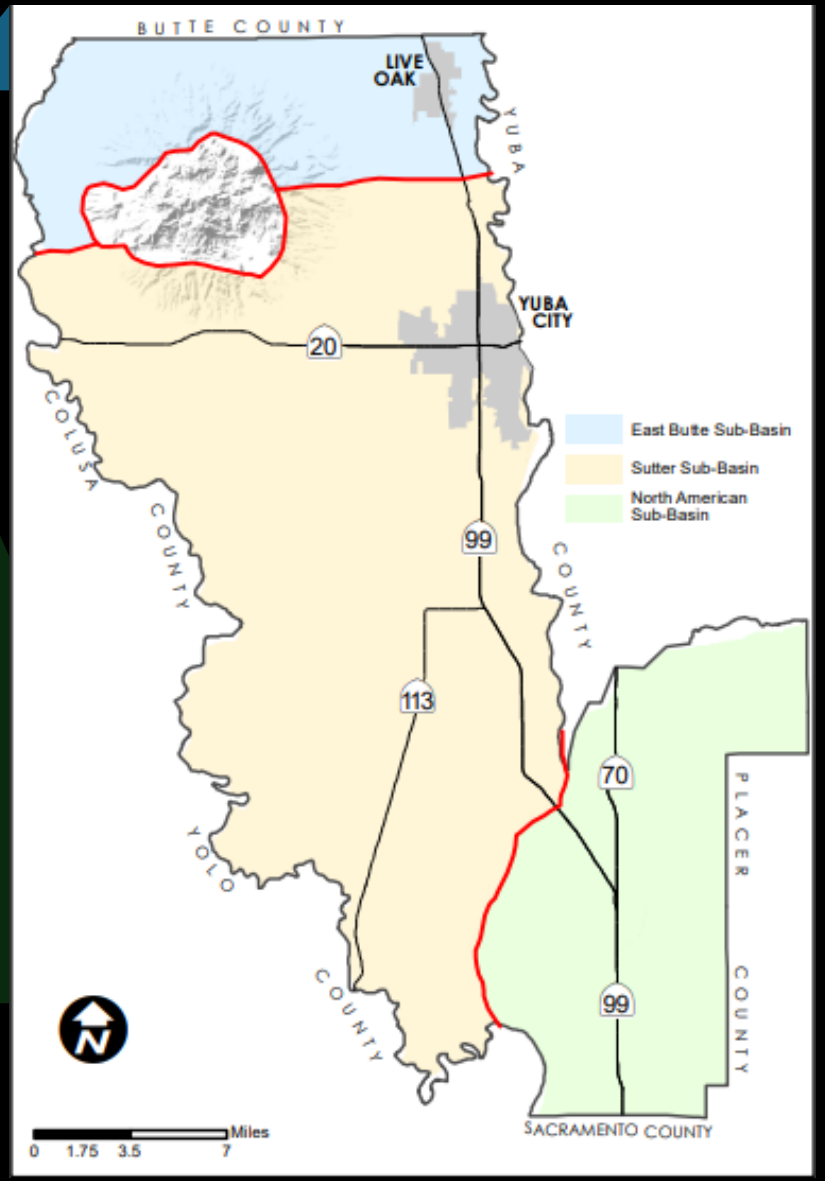
Emergency
Operations Plan
September 27, 2022

SUTTER COUNTY

OEM

SUTTER COUNTY
OFFICE OF EMERGENCY MANAGEMENT
1130 CIVIC CENTER BLVD, SUITE E
YUBA CITY, CA 95993

NORTH AMERICAN SUBBASIN
Groundwater Sustainability Plan



Activity	Deadline	Responsibility	Detail/Strategy/Status
Current (1-3 months)			
Identify key stakeholders	September 30, 2024	SCOEM	Invitation to cities, county depts, LMAs
Create flyer and Facebook post	October 30, 2024	SCOEM	Use Canva for visual impact
Create Microsoft Form to solicit information	November 30, 2024	SCOEM/IT	Specific for surveys, questions, and comments
3 to 6 months			
Solicit initial feedback from community	February 5, 2025	SCOEM/DS	Use LMAs to encourage their communities to take survey and submit to SCOEM
Create drought brochure for distribution	March 12, 2025	SCOEM	Create public awareness to drought phenomenon – supply local agencies and public facilities
6 to 9 months			
Solicit feedback from community	April 30, 2025	SCOEM	Provide drafted plan details, request feedback and comments
Solicit comments and feedback from academia and local agencies	May 7, 2025	SCOEM	Provide drafted plan details, request feedback and comments
Create website advertisement	May 28, 2025	SCOEM	Request further feedback and comments from the public
9 to 12 months			
Create final survey for website, Facebook	June 18, 2025	SCOEM	Request final feedback from community and local agencies
Exploit drafted plan on website for final comment	July 5, 2025	SCOEM	Allow public to review plan and provide final comments
Board approval (county departments)	August 31, 2025	SCOEM	Provide public description of final plan framework and action plan

Drinking Water Mitigation Template

Tien Tran
March 2025

COMMUNITY WATER CENTER
EL CENTRO COMUNITARIO POR EL AGUA

CWC's AGUA Coalition

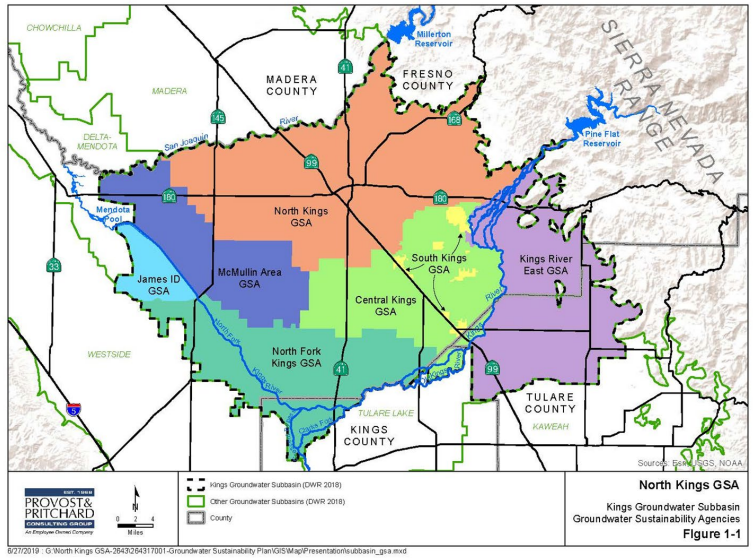
Priority Basins

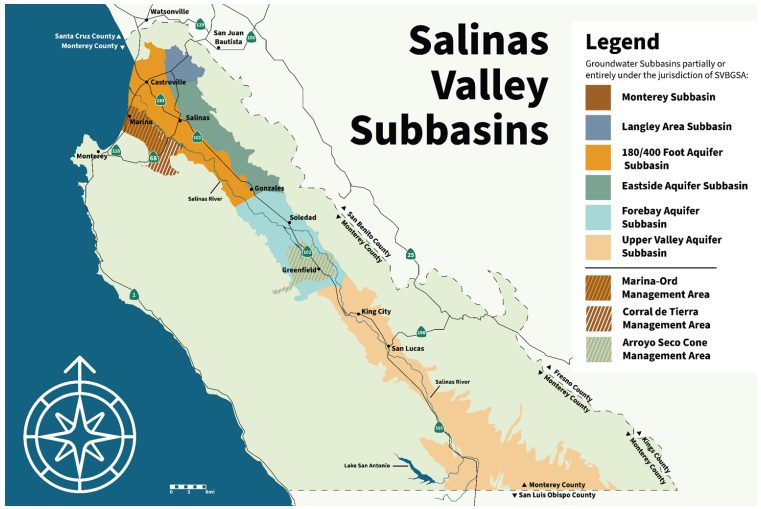
San Joaquin Valley

- Fresno County- Kings
- Tulare County- Kaweah and Tule

Central Coast

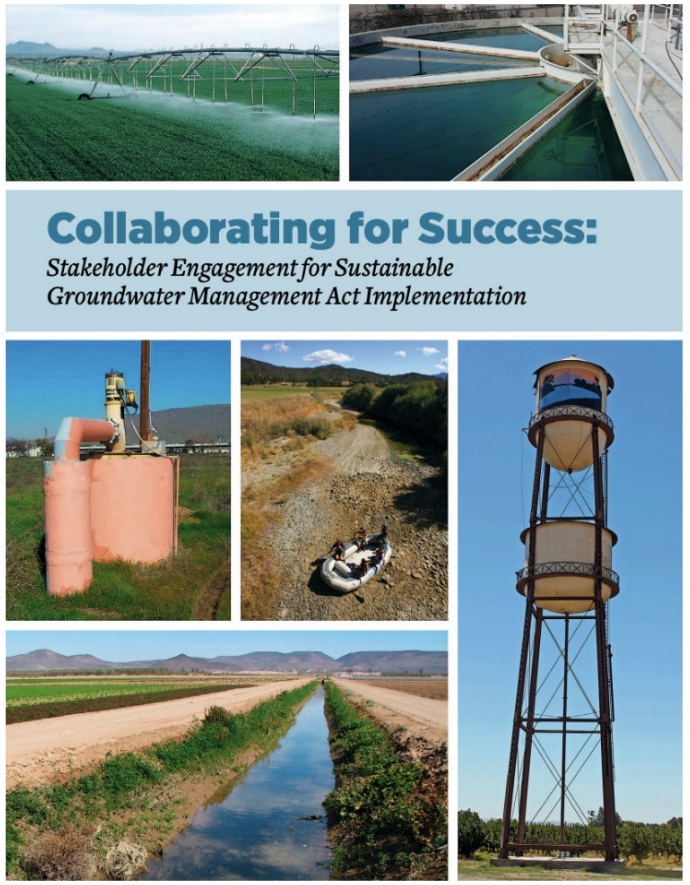
- Monterey County- Salinas Valley and Arroyo Seco
- Santa Cruz County- Pajaro Valley





Guidance Documents

[DWR's Guidance: Considerations for Identifying and Addressing Drinking Water Well Impacts]



[CWC's Stakeholder Engagement Guidance]

Drinking Water Mitigation Template

- Well mitigation = well protection
  - Prevent impacts
  - Respond to impacts
  - Plan long-term solutions
- Local agencies need to coordinate and outline roles.
- Posted on DWR's URCTA website

Adaptive Management

EXAMPLE TRIGGER SYSTEM			
Trigger	**Groundwater Conditions & Impacts**	**Quantifiable Measures**	**Corrective Actions**
Green Light	Groundwater levels are stable.	Firmly in compliance with MOs.	No action required.
	Groundwater quality is stable.	Firmly in compliance with MCLs.	No action required.
	Seawater intrusion is stable.	Firmly in compliance with the chloride MCL.	No action required.

Adaptive Management

Yellow Light	Groundwater elevations are approaching concerning levels; negative impacts may occur or are already occurring. Some corrective action is needed.	3% of drinking water wells have gone partially or fully dry, or 5% of drinking water wells in the GSP area are projected to go dry if current trends continue. ___# of wells	• Conduct analysis to determine the cause; • Conduct water quality testing for select domestic and public supply wells; • Provide immediate support to groundwater users experiencing impacts; • Reassess pumping allocations and pumping patterns; • Consider restricting or limiting groundwater extraction near the impacted area.
	Groundwater quality is approaching concerning levels; negative impacts may occur or are already occurring. Some corrective action is needed.	Water quality reaches 70% of the MCL in any given monitoring well. ___# of wells	• Conduct an analysis to determine the cause; • Conduct water quality testing for selected domestic and public supply wells; • Provide immediate support to groundwater users experiencing impacts; • Reassess pumping allocations and pumping patterns; • Consider restricting or limiting groundwater extraction near the impacted area.
	Seawater intrusion is approaching concerning levels; negative impacts may occur or are already occurring. Some corrective actions are needed.	Chloride levels reach 70% of the MCL in any given monitoring well. ___# of wells	• Conduct an analysis to determine the cause; • Conduct chloride testing for selected domestic and public supply wells; • Provide immediate support to groundwater users experiencing impacts; • Reassess pumping allocations and pumping patterns; • Consider restricting or limiting groundwater extraction near the impacted area.

Adaptive Management

EXAMPLE TRIGGER SYSTEM			
Trigger	**Groundwater Conditions & Impacts**	**Quantifiable Measures**	**Corrective Actions**
Red Light	Time to stop groundwater pumping and any projects or management actions that are causing wells to go dry. The GSA needs to mitigate impacts immediately; significant impacts are imminent or are already occurring.	More than 7% of drinking water wells have gone dry, or 10% of drinking water wells in the GSP area are projected to go dry if current trends continue. ___# of wells	• Reassess pumping allocation and pumping patterns; • Consider further restricting or limiting groundwater extraction near the triggered area or reevaluating minimum thresholds or measurable objectives; • Provide interim emergency solution(s) while working with impacted groundwater users and local and state agencies to pursue a permanent, long-term solution.
	Time to stop groundwater pumping and any projects or management actions that are causing contaminated wells. The GSA needs to mitigate impacts immediately; significant impacts are imminent or are already occurring.	Water quality reaches 85% of the MCL in any given monitoring well. ___# of wells	• Reassess pumping allocations and pumping patterns; • Consider further restricting or limiting groundwater extraction near the triggered area or reevaluating minimum thresholds or measurable objectives; • Provide interim emergency solution(s) while working with impacted groundwater users to pursue a permanent, long-term solution.
	Time to stop groundwater pumping and any projects or management actions that are causing seawater intrusion. The GSA needs to mitigate impacts immediately; significant impacts are imminent or are already occurring.	Chloride levels reach 85% of the MCL in any given monitoring well. ___# of wells	• Reassess pumping allocations and pumping patterns; • Consider further restricting or limiting groundwater extraction near the triggered area or reevaluating minimum thresholds or measurable objectives; • Provide interim emergency solution(s) while working with impacted groundwater users to pursue a permanent, long-term solution.

Case Study: East Kaweah Groundwater Sustainability Agency

Activation	Conditions	Investigation	Outreach	Mitigation	Groundwater Management
Green	Groundwater conditions are stable at or above established Measurable Objective (MO). No issues are anticipated	Continued GSP monitoring	Annual Report	None expected. (continue existing practices). *In the event a Mitigation Claim is approved within a "green" Analysis Zone (formerly referred to as "Threshold Region"), then the GSA will evaluate the efficacy of the sustainable management criteria within that Analysis Zone.*	Continue current groundwater management strategies as laid out in the GSP.
Yellow	Groundwater conditions below MO and above 50% of operational range and above the established Minimum Threshold (MT) by Analysis Zone (formerly referred to as "Threshold Region[2]")	1. Review monitoring network and results to identify specific conditions that need further investigation. 2. Initiate investigation and vetting of specific conditions. 3. Evaluate monitoring frequency.	Annual Report to include GSA map indicating impacted and/or vulnerable areas.	Impacted wells to undergo Mitigation Claim process via this Mitigation Plan. GSA in conjunction with existing drinking water mitigation agencies to provide effective mitigation measures, outreach, and well stewardship education.	GSA to evaluate annual groundwater allocation amount for the next allocation period.
Orange	Groundwater conditions below 50% of the operational range and above the established MT by Analysis Zone (formerly referred to as "Threshold Region")		Annual Report to include visualization of impacted areas on GSA map. Outreach and communication initiative with impacted well users.		GSA to evaluate and implement (if necessary) localized groundwater pumping limits and actions.
Red	Groundwater conditions at or below established MTs by Analysis Zone (formerly referred to as "Threshold Region")	1. Review monitoring network and results to identify specific conditions that need further investigation. 2. Initiate investigation and vetting of specific conditions. 3. Increase monitoring frequency.	Annual Report to include visualization of impacted areas on GSA map. Outreach and communication initiative with impacted well users. Local agencies consulted to improve investigation, outreach, and opportunities for improved management.	Impacted wells to undergo Mitigation Claim process via this Mitigation Plan. GSA in conjunction with existing drinking water mitigation agencies to provide effective mitigation measures, outreach, and well stewardship education. GSA to investigate long-term, larger scale solutions.	GSA to evaluate and implement (if necessary) broader groundwater pumping limits or alternative actions.

EKGSA Mitigation Plan

Questions?

- Tien Tran, Policy Manager, tien.tran@communitywatercenter.org

MENDOCINO COUNTY DROUGHT RESILIENCE PLAN

19 MARCH 2025
COUNTY CAFÉ

DROUGHT STAGES AND RESPONSE ACTIONS

COUNTY'S OBJECTIVE, CHALLENGES AND ROLE

Objective:

Facilitate increased and structured drought preparedness for domestic wells and State Small Water Systems under its Jurisdiction

Main Challenges:

- Not a water supplier with no annual budget to undertake water supply projects.
- Have found it challenging to obtain meaningful participation & input from stakeholders.

County's Role:

- Will rely on coordination and collaboration with local entities for meaningful improvements in water resiliency.

Inform, Educate, Outreach, and Engage

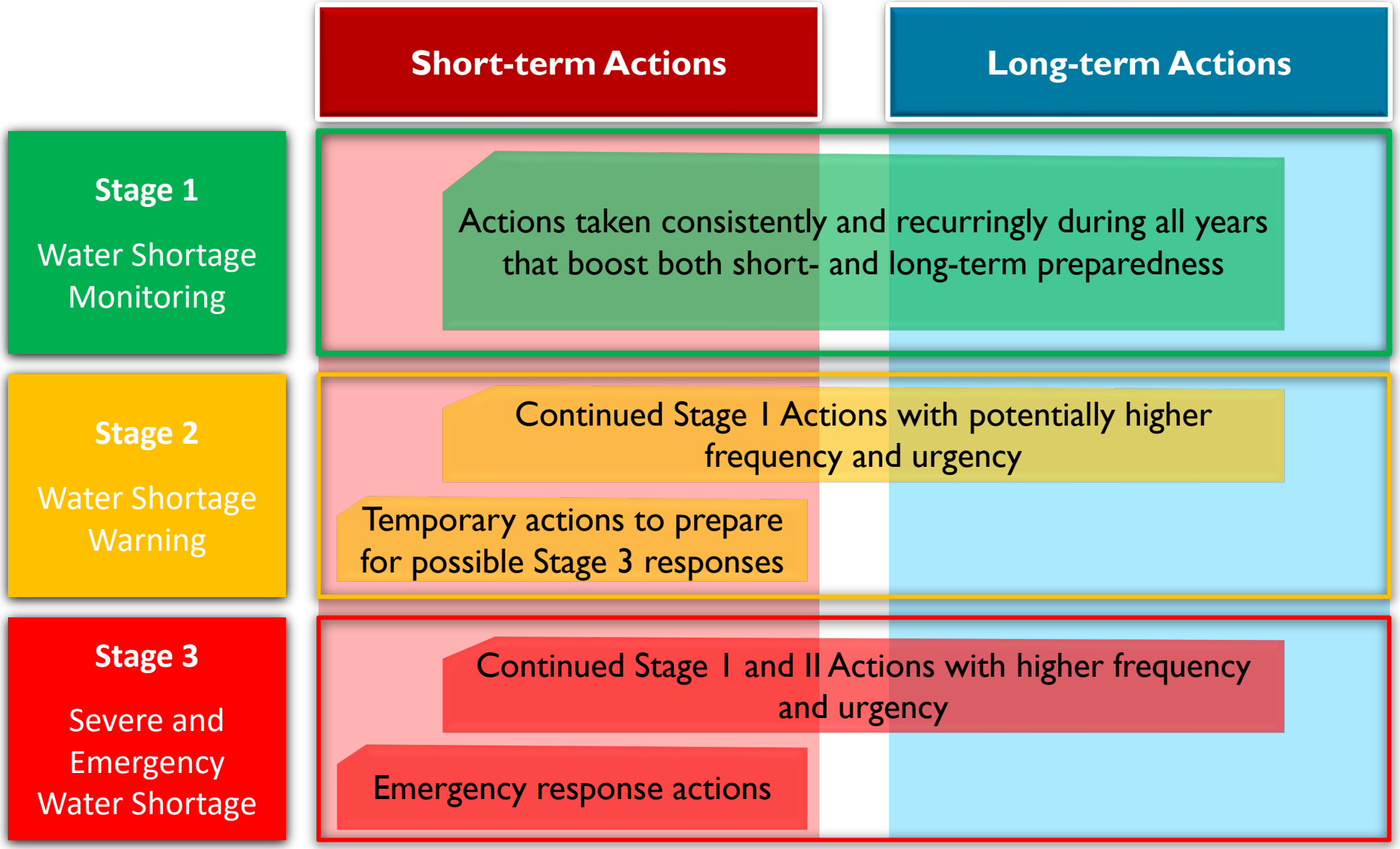
Track and Monitor Conditions, Implement Appropriate Ordinances and Declarations

Facilitate and Provide Venue for Coordination, Information Sharing, Communication, Collaboration, and Partnerships

Identify & Pursue Funding

Facilitate and Lead Emergency Actions

DROUGHT STAGES AND RESPONSE ACTIONS



DROUGHT STAGES AND RESPONSE ACTIONS

Tracking, Monitoring, and Information Sharing	Community Engagement and Outreach	Drought Task Force	Facilitate Mutual Aid Agreements
Partnerships with NGOs and State Agencies	Coordination with GSA	Identify Funding Opportunities +	Voluntary Water Cutbacks
Temporary Ordinances	Identify and Pursue Additional Funding +	Emergency and Interim Drinking Water Supplies	Emergency Declarations

DEFINING DROUGHT STAGE TRIGGERS

DEFINING DROUGHT STAGE TRIGGERS

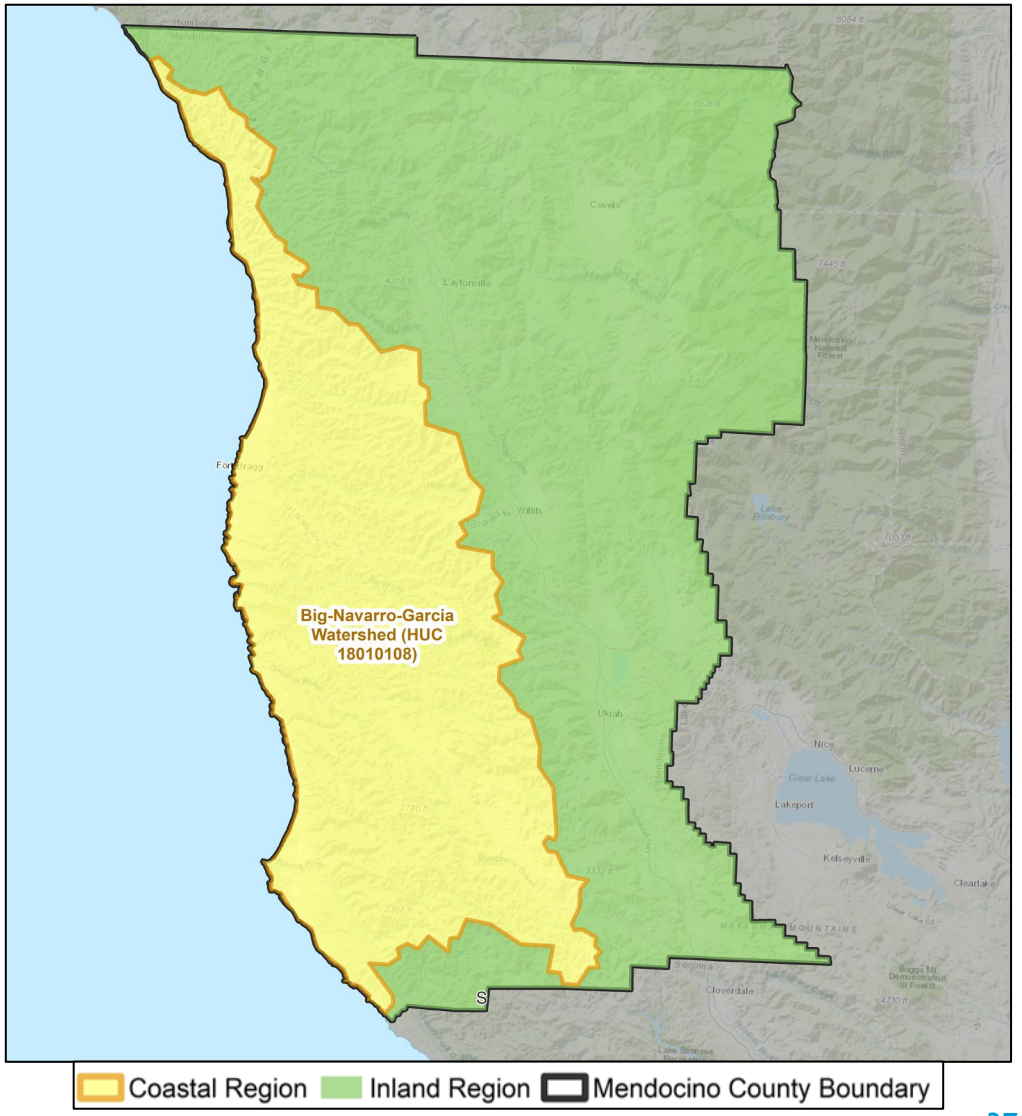
- Reviewed USDA, County, and State drought declarations from 2021 for guidance on triggers
  1. March 5, 2021 – USDA declared Drought Disaster
     - U.S. Drought Monitor Intensity Classification values (7 Code of Federal Regulations § 759.5)
  2. April 20, 2021 – County declared Drought Emergency
     - Lower than average rainfall totals
     - Lower than average reservoir levels of Lake Pillsbury and Lake Mendocino
  3. April 21, 2021 – State declared Drought Emergency
     - Two-year average rainfall totals
     - Record low reservoir levels of Lake Pillsbury and Lake Mendocino

DEFINING DROUGHT STAGE TRIGGERS

- Reviewed DWR Guidebook, County Café notes from 11/13, Tulare and Santa Cruz County draft DRPs
- Reviewed available past drought/ current data for the County related to:
  - Groundwater
    - Groundwater levels: CASGEM
    - Dry Wells: DWR Dry Well Reporting System
  - Hydrology
    - U.S. Drought Monitor
    - Rainfall from DWR California Water Watch
    - Reservoir Levels of Lake Mendocino and Lake Pillsbury

DEFINING DROUGHT STAGE TRIGGERS

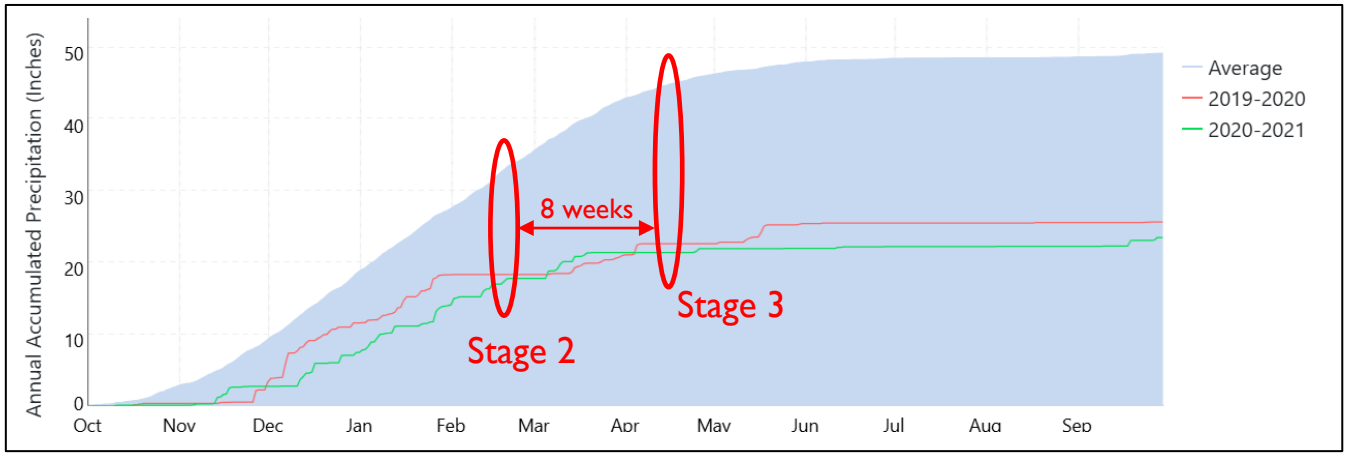
- Defined drought triggers according to regional and County-wide conditions that are consistent with past declarations and by adding dry wells as an additional metric.
  - County-wide: Using U.S. Drought Monitor weekly designations (D0-D4)
    - 7 Code of Federal Regulations § 759.5 outlines terms for declaring a drought disaster based on Drought Monitor Intensity Classification values
  - Regional: Based on average conditions during normal, dry, and drought conditions
    - Inland: Comparing Lake Mendocino reported storage to its target storage curve
    - Coastal: Comparing total rainfall for Big-Navarro-Garcia Watershed to its long-term average



DEFINING DROUGHT STAGE TRIGGERS

Coastal Zone

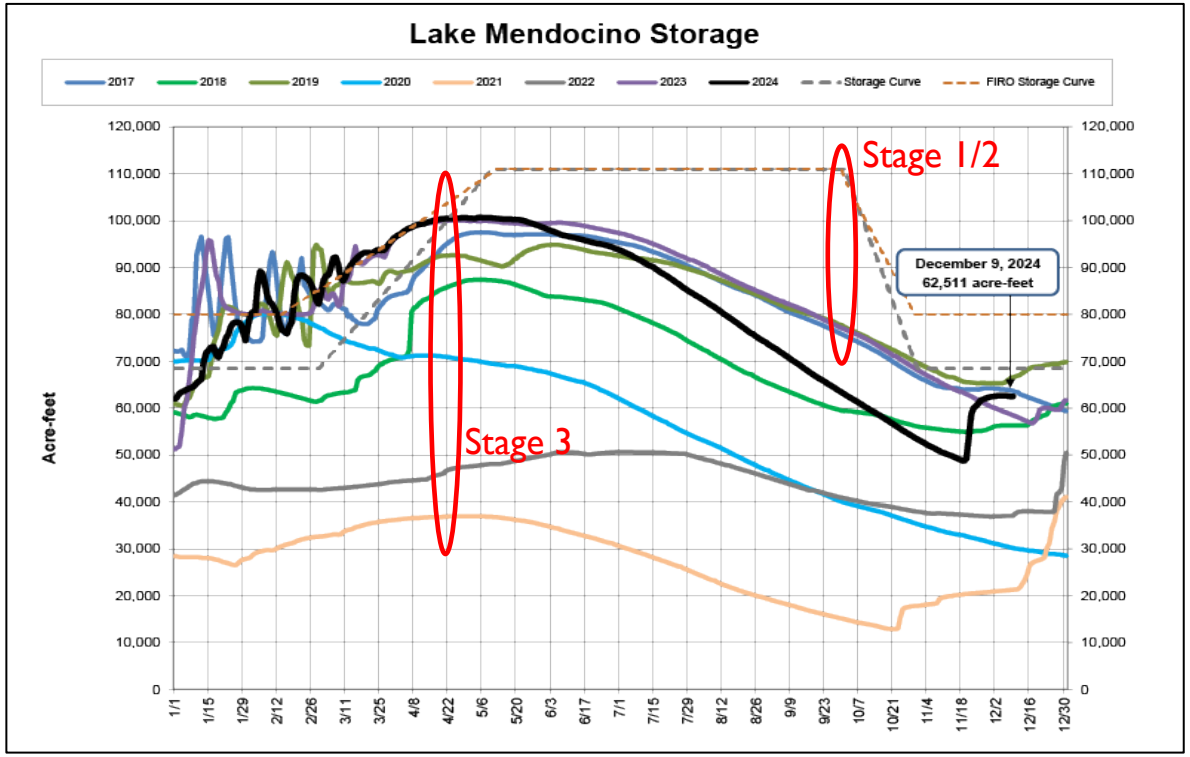
- Precipitation totals (Big-Navarro-Garcia Watershed)



Stage 1: 2-year total is 80% or more of average
Stage 2: 2-year total is 50 – 80% of average
Stage 3: 2-year total is <50% or less of average

Inland Areas

- Lake Mendocino Reservoir Storage Levels

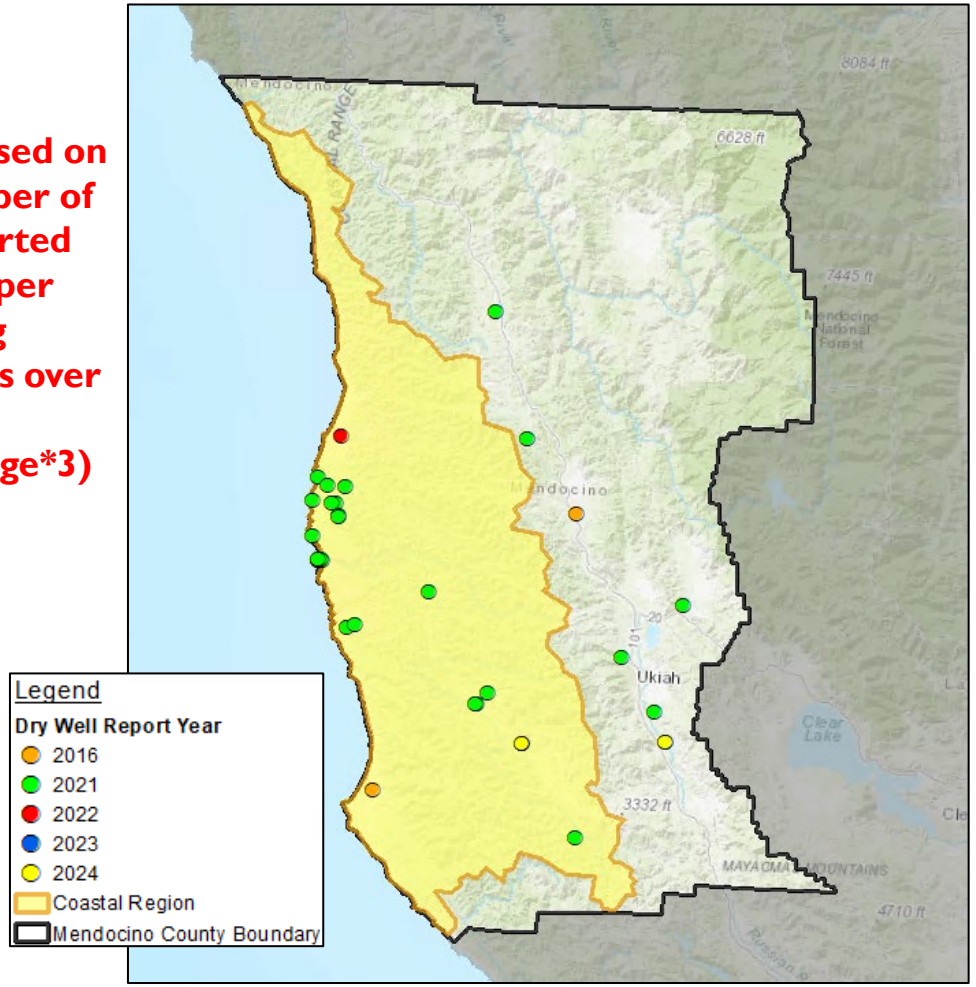


Stage 1: Total storage >70% of total target supply curve
Stage 2: Total storage 45 - 70% of total target supply curve
Stage 3: Total storage <45% of total target supply curve

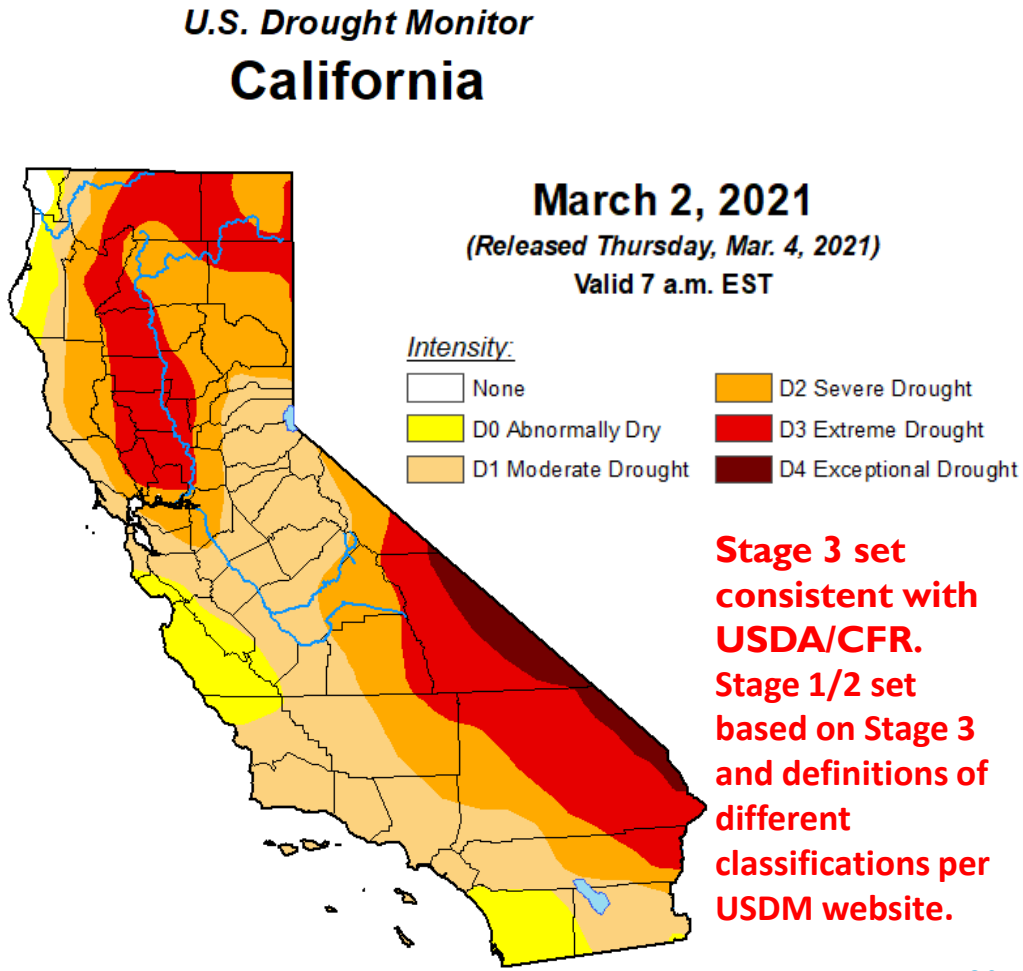
DEFINING DROUGHT STAGE TRIGGERS

- Dry Well Reports

Stages set based on average number of dry well reported in each zone per month during drought times over any 3-month period (average*3)



- U.S. Drought Monitor (USDM)



Stage 3 set consistent with USDA/CFR. Stage 1/2 set based on Stage 3 and definitions of different classifications per USDM website.

DEFINING DROUGHT STAGE TRIGGERS

Drought Stage	COASTAL REGION		INLAND REGION		COUNTY
	Dry Well Reports	Current Year Hydrology	Dry Well Reports	Current Year Hydrology	U.S. Drought Monitor
1 – Water Shortage Monitoring	Less than 4 reports over any three-month period	Two-year precipitation total is 80% or more of average	Less than 4 reports over any three-month period	Lake Mendocino total storage is greater than 70% of total target water supply curve	None; **OR** D0 Abnormally Dry
2 – Water Shortage Warning	4 – 12 reports over any three-month period	Two-year precipitation total is 50 – 80% of average	4 – 6 reports over any three-month period	Lake Mendocino total storage is 45 - 70% of total target water supply curve	D1 Moderate Drought; **OR** D2 Drought-Severe for less than 8 consecutive weeks
3 – Severe and Emergency Water Shortage	12 or more reports over any three-month period	Two-year precipitation total is less than 50% average	6 or more reports over any three-month period	Lake Mendocino total storage is less than 45% of total target water supply curve	D2 Drought-Severe for 8 or more consecutive weeks; **OR** D3 Drought-Extreme; **OR** D4 Drought-Exceptional

END

Short-term Response Actions Discussion

1. What local and state information do you have that can be used to inform your drought and water shortage response actions?
2. What other planning efforts does your DRP best align with?

Resources:

- General questions on developing short-term response actions – Reference the **DWR County Drought Resilience Plan Guidebook**
- For specific questions about your county – Reach out to DWR at **CountyDRP@water.ca.gov**

Polling: What should we discuss at our next gathering?

Please add in the chat **your most pressing topic** that you would like to be discussed next in the County Café Gathering.

Upcoming Counties Discussion Opportunities:

April 2, 2025: Water Shortage Vulnerability Tool Overview and Tutorial – Small Water Systems (registration link)

→ Recording and presentation are available for the DW and SSWS Webinar

April 16, 2025, 9AM – 10AM: Café Gathering - Office Hours (registration link)

Closing – Thank you!

Next steps – we will follow up with an email to counties for future gatherings, ppt, invitation to share in upcoming gathering.