

# MENDOCINO COUNTY DROUGHT RESILIENCE PLAN

**5 SEPTEMBER 2024**  
**PUBLIC WORKSHOP #1**

**ANDREE LEE – EKI ENVIRONMENT AND WATER**  
**LAURA GARZA – UCCE WATER AND CLIMATE CHANGE ADVISOR**

---

# PURPOSE OF THE MEETING

## **I. Provide clear understanding of the Mendocino County Drought Resilience Plan (DRP)**

Purpose, scope, and the process of its development.

## **II. Open Discussion**

Gather valuable input from all of you regarding your experiences, challenges, and ideas related to drought preparedness

# AGENDA

## I. Understanding Drought Resilience Plan (DRP)

1. Drought in Mendocino
2. SB 552 and DRP Background
3. County Drought Task Force
4. DRP Development Process
5. Risk Assessment
6. Public Engagement Opportunities

## II. Community Open Discussion

- I. Questions and Discussion





# DROUGHTS IN MENDOCINO



# UNDERSTANDING DROUGHT

**Drought** is the lack of precipitation over an extended period. It is a normal, recurrent feature of climate that occurs in virtually all climate zones.

The duration of droughts varies widely: from months and years, to decades.



# UNDERSTANDING DROUGHT

**Because of the interplay between a natural drought event and various human factors, drought means different things to different people.**



**Domestic Use**



**Agriculture**



**Businesses**



**Fish and Game**

**Droughts are among the most expensive weather-related events**

# DROUGHT IN MENDOCINO

## Mendocino County

was one of the first places where California Gov. Gavin Newsom declared a drought emergency in the latest drought (2020-2022).

- Calmatters.org










# DROUGHTS INTENSITY AND IMPACTS

Intensity	Description	Possible Impacts
D0	Abnormally Dry	Going into drought: short-term dryness slowing planting, growth of crops or pastures Coming out of drought: some lingering water deficits pastures or crops not fully recovered
D1	Moderate Drought	Some damage to crops, pastures Streams, reservoirs, or wells low, some water shortages developing or imminent Voluntary water-use restrictions requested
D2	Severe Drought	Crop or pasture losses likely Water shortages common Water restrictions imposed
D3	Extreme Drought	Major crop/pasture losses Widespread water shortages or restrictions
D4	Exceptional Drought	Exceptional and widespread crop/pasture losses Shortages of water in reservoirs, streams, and wells creating water emergencies

## U.S. Drought Monitor

### Intensity

-  None
-  D0 (Abnormally Dry)
-  D1 (Moderate Drought)
-  D2 (Severe Drought)
-  D3 (Extreme Drought)
-  D4 (Exceptional Drought)
-  No Data

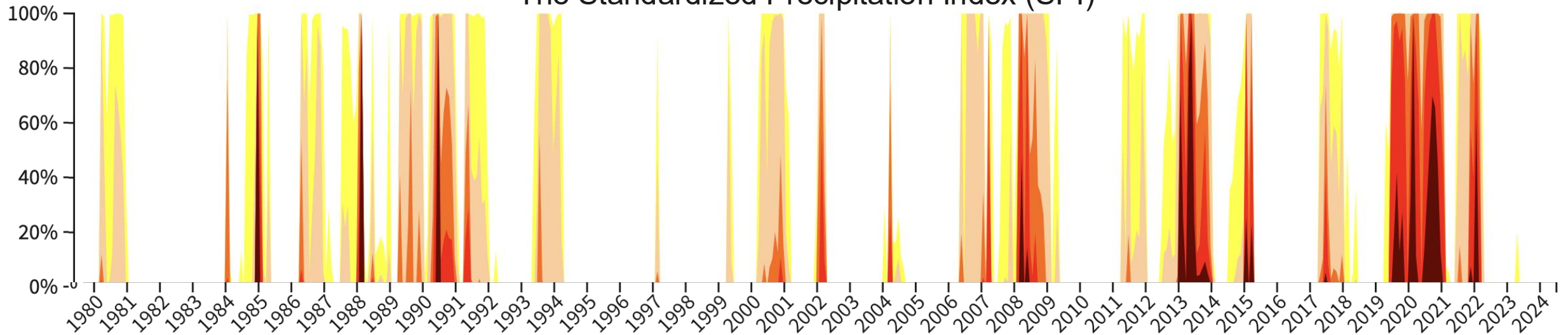


# MENDOCINO HISTORIC DROUGHTS

## Intensity

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data

**U.S. Drought Monitor**  
The Standardized Precipitation Index (SPI)



U.S. Drought Monitor

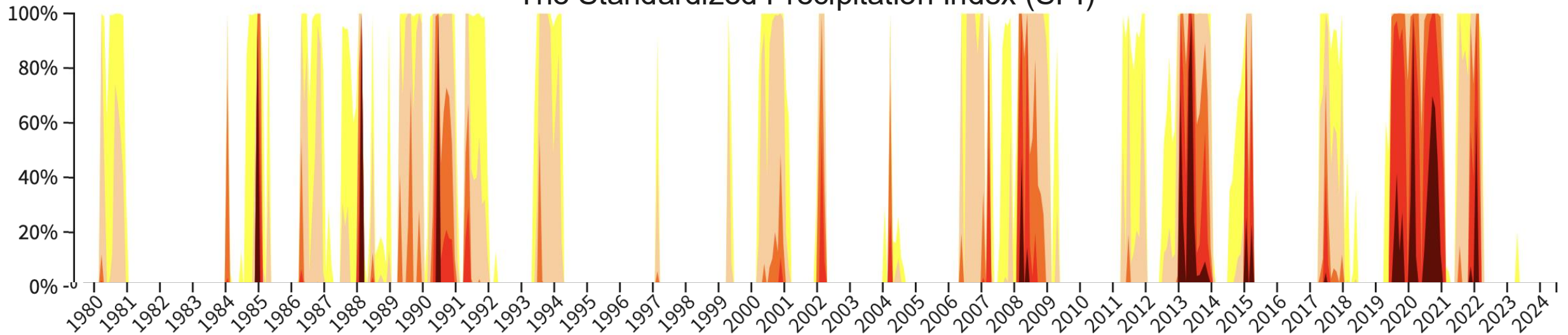
# MENDOCINO HISTORIC DROUGHTS

In California and Mendocino County, droughts on average last 3 years, in the last 45 years we've seen an increase in intensity and frequency of droughts...

## Intensity

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data

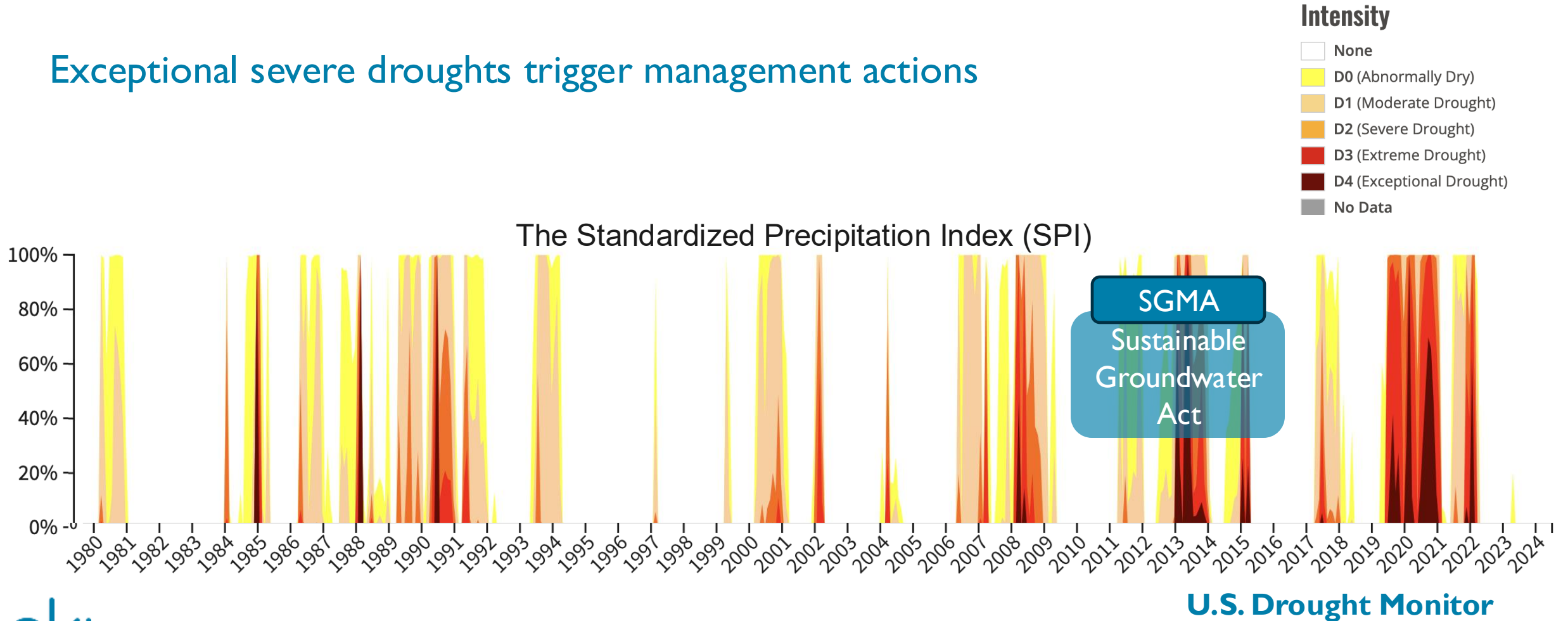
**U.S. Drought Monitor**  
The Standardized Precipitation Index (SPI)



U.S. Drought Monitor

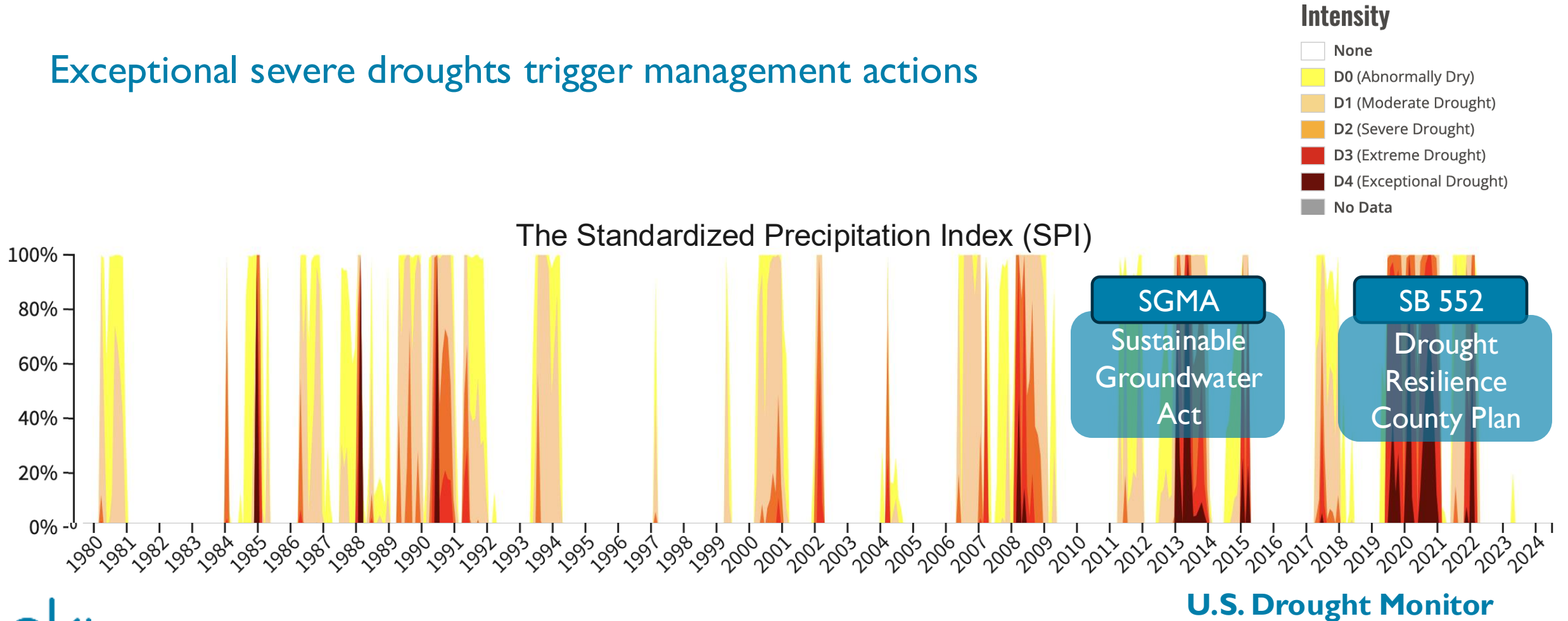
# MENDOCINO HISTORIC DROUGHTS

Exceptional severe droughts trigger management actions



# MENDOCINO HISTORIC DROUGHTS

Exceptional severe droughts trigger management actions





# **SB 552 AND DRP BACKGROUND**



# SB-552 OVERVIEW

- Signed by the Governor of California in September 2021
- Outlines requirements for small water suppliers, county governments, DWR, and the State Water Board to implement more proactive drought planning and be better prepared for future water shortage events or dry years
- In February 2024, the County received a \$125,000 grant from DWR to support SB 552 compliance, including convening of a Drought Task Force and development of a Drought Resilience Plan (DRP)



<https://www.kqed.org/science/1975549/russian-river-drought-sonoma-and-mendocino-residents-save-the-little-water-they-have>

# SB 552 COUNTY REQUIREMENTS (CA WATER CODE § 10609.70):

1

## Establish a Standing County Drought Task Force

- To facilitate drought and water shortage preparedness for state small water systems and domestic wells
- Invite representatives from the state and other local governments (GSAs, Water Suppliers, Residents) to participate in the task force

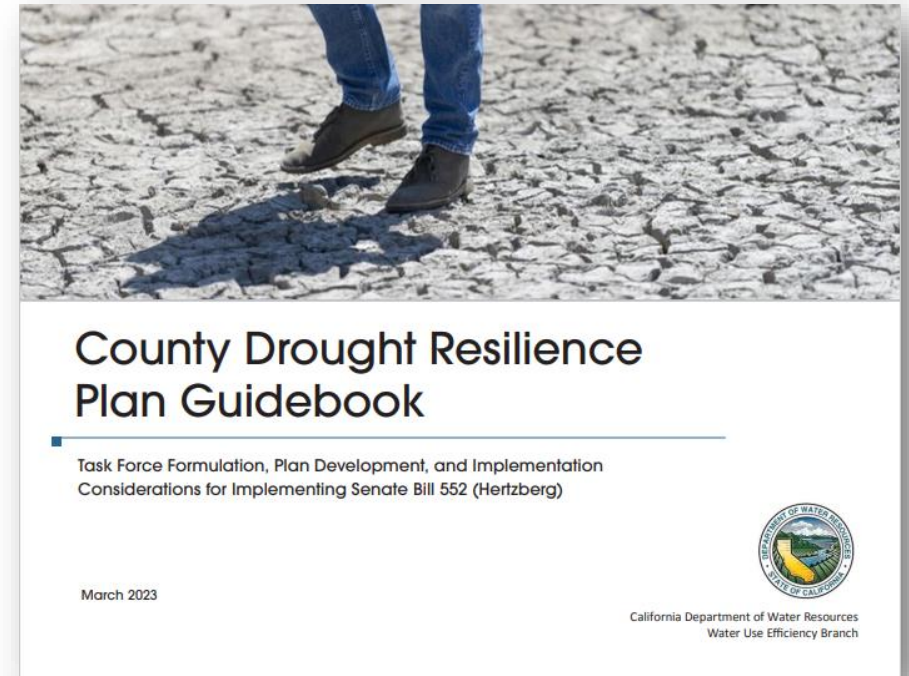
2

## Develop a Drought Resilience Plan

- Develop a plan that includes potential drought and water shortage risk and proposed interim and long-term solutions for state small water systems and domestic wells.

# DROUGHT RESILIENCE PLAN COMPONENTS

- Per SB 552, Drought Resilience Plan must consider, at a minimum:
  1. Consolidations for existing water systems and domestic wells
  2. Domestic well drinking water mitigation programs
  3. Provision of emergency and interim drinking water solutions
  4. An analysis of the steps necessary to implement the plan
  5. An analysis of local, state, and federal funding sources available to implement the plan







# COUNTY DROUGHT TASK FORCE



# TASK FORCE RESPONSIBILITIES & POTENTIAL ROLES

## Requirements

Established before 1 Jan 2022.

Have regularly scheduled meetings during non-emergency periods, and more frequent meetings during drought and water shortage emergencies.

Provide level of function and participation included in SB-552 and demonstrate its continuation in perpetuity.

Facilitate drought and water shortage preparedness and collaborate in development of DRP.



## Potential Roles

Share findings and recommendations with communities and provide briefings to the BOS.

Identify data gaps and necessary actions for improved drought and water shortage planning.

Facilitating proactive planning and coordination to reduce risk of water shortage (GSP implementation, SB-552 compliance, human right to water, etc.)

Share and pursue funding opportunities for improving water resiliency.

Encourage and implement long-term planning that anticipates budget and policy needs.

# COUNTY DROUGHT TASK FORCE (CDTF)

- The CDTF has met frequently since 2021 and currently convenes during County General Government Standing Committee (GGSC) Meetings
- Invited Membership
  - “Core” members that are legally responsible for public water systems, state smalls, domestic wells, or implementing SB-552.
    - Mendocino County
    - Major Water Suppliers (Cities of Ukiah, Fort Bragg, and Willits, MCCSD, RRFCCID)
    - Ukiah Valley Basin Groundwater Sustainability Agency (UVBGS)
    - Mendocino County Resource Conservation District (MCRCD)
  - Other members include tribes, other public water systems, residents supplied by domestic wells or state smalls, and state water agencies



## Mendocino County Drought Task Force Charter

Mendocino County (County) has developed this Charter to establish and maintain a County Drought Task Force in accordance with Senate Bill (SB) 552 and the Best Practices outlined in the California Department of Water Resources' (DWR's) County Drought Resilience Plan Guidebook<sup>1</sup>, dated March 2023.

### PURPOSE & GOALS

The purpose of the Drought Task Force is to facilitate drought and water shortage preparedness for state small water systems and domestic wells by identifying short-term and long-term solutions to improve County water supply reliability and protect ecosystem health. The Drought Task Force will lead and support coordination of government agencies, community organizations, residents, tribes, and private entities that are involved in water, wastewater, conservation and flood control services throughout the County.

### BACKGROUND

The Drought Task Force is maintained under the County Board of Supervisors (Board) Public Health, Safety, and Resources (PHSR) Standing Committee. As such, the Drought Task Force is subject to the *Rules of Procedure of the Board of Supervisors of the County of Mendocino*, which outlines the working procedures for Board and committee meetings. Two County Supervisors are appointed as members of the PHSR Committee (referred to as "Board PHSR Appointees" herein) and oversee the Drought Task Force. The Board PHSR Appointees are required to report to the full Board after each PHSR committee meeting, including Drought Task Force meetings, and bring Drought Task Force recommendations and actions before the full Board for decision-making.

### Membership

The Drought Task Force is comprised of core members that are representatives of organizations and agencies legally responsible for public water systems, state small water systems, and domestic wells and implementing the requirements of SB 552. Other members of the Drought Task Force include those who may have resources, capabilities, and ideas to contribute to drought and water shortage supply planning. Representatives from the following groups will be invited to participate in the Drought Task Force:

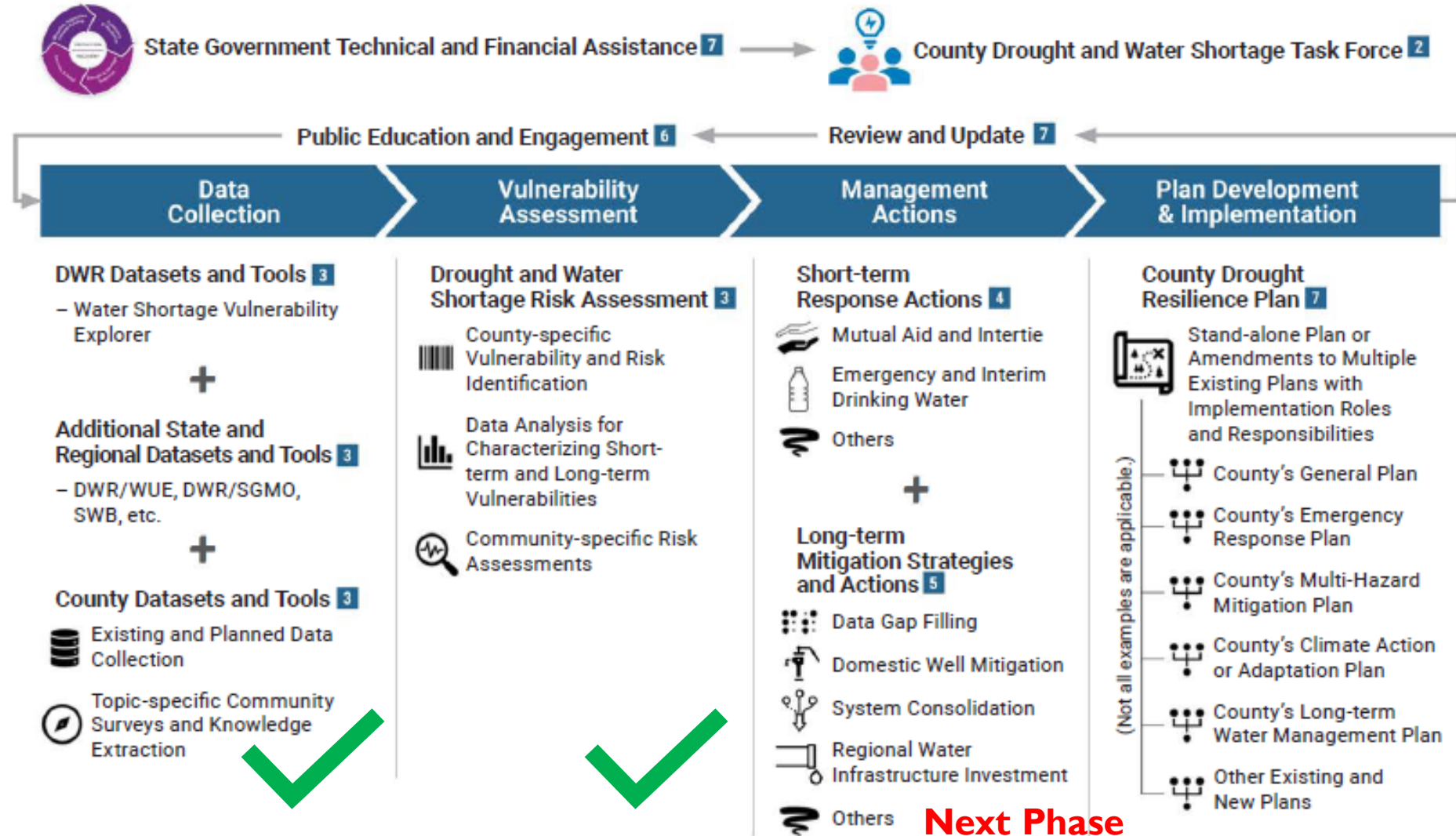
<sup>1</sup> [https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/SB-552/DWR\\_Final\\_Guidebook\\_20230313\\_ADA\\_508\\_v5.pdf](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/SB-552/DWR_Final_Guidebook_20230313_ADA_508_v5.pdf)



# DRP DEVELOPMENT PROCESS



# DROUGHT RESILIENCY PLAN DEVELOPMENT



# DROUGHT RESILIENCY PLAN TIMELINE



\* County Drought Task Force meetings planned for: September 25, 2024 and January, March, and April 2025 (Dates TBD)

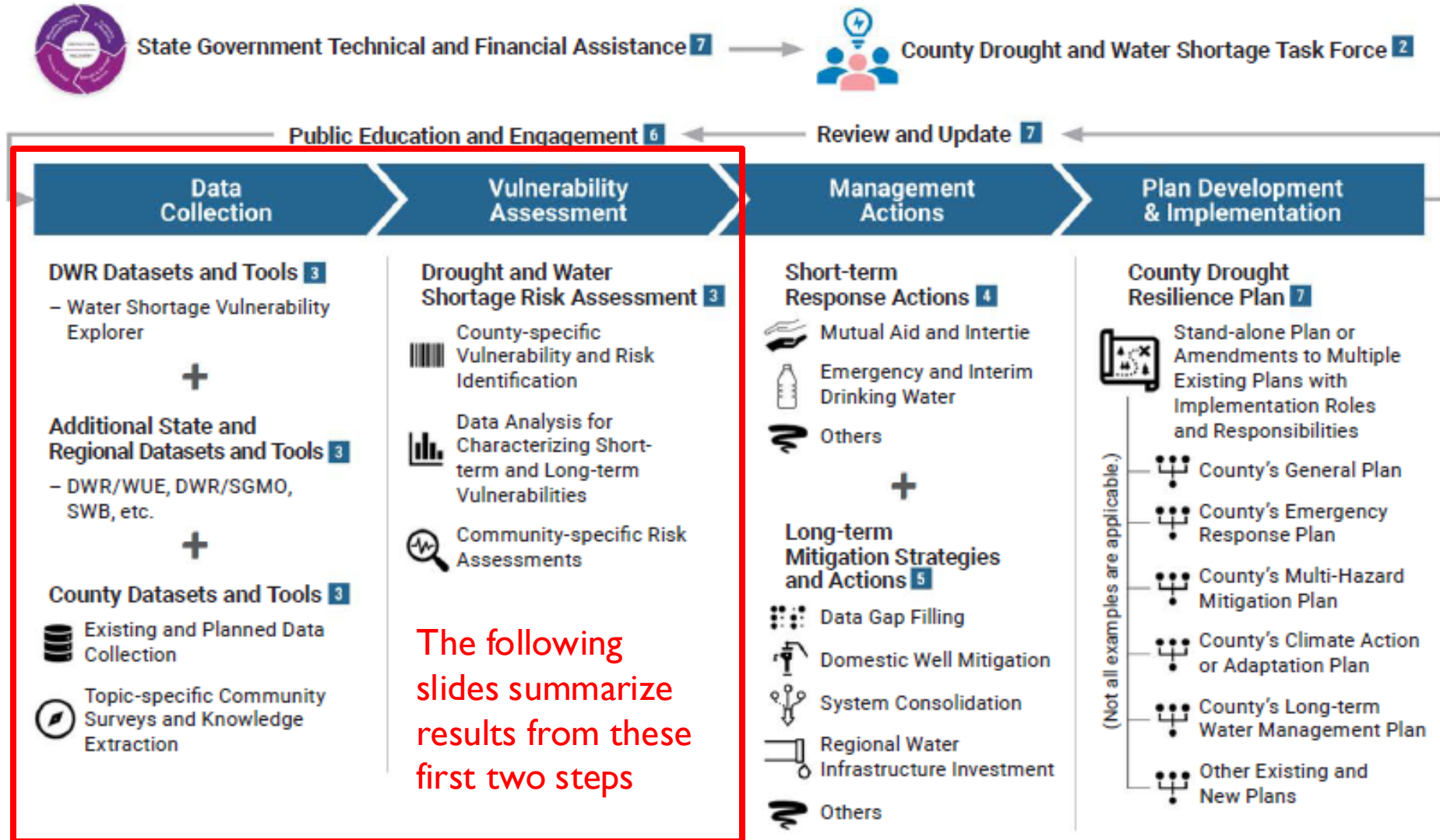
\*\* A second community workshop is planned for February 2025



# **DROUGHT AND WATER SHORTAGE RISK ASSESSMENT**

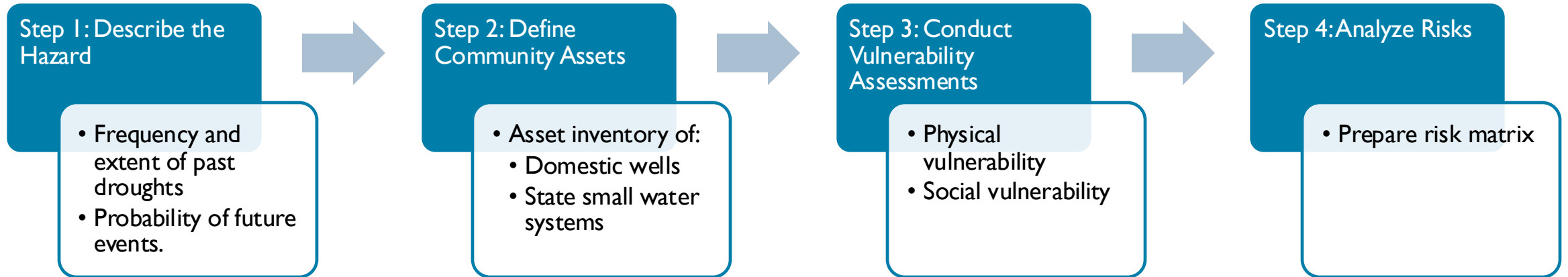


# DROUGHT RESILIENCY PLAN DEVELOPMENT





# RISK ASSESSMENT APPROACH



- Relevant physical vulnerabilities associated with drought include Household Water Outage, Dry Well Susceptibility, Groundwater Level Decline, Wildfire, and Groundwater Quality,
- Social vulnerabilities include Household Income, Employment Status, Language, etc.
- DWR's statewide physical and social vulnerability scoring was spatially overlaid with domestic well and state small water system locations to identify at-risk populations

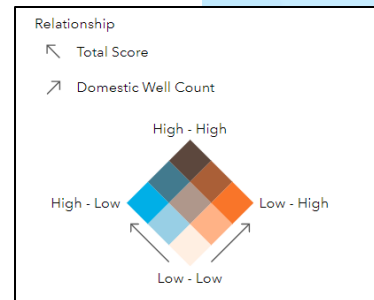
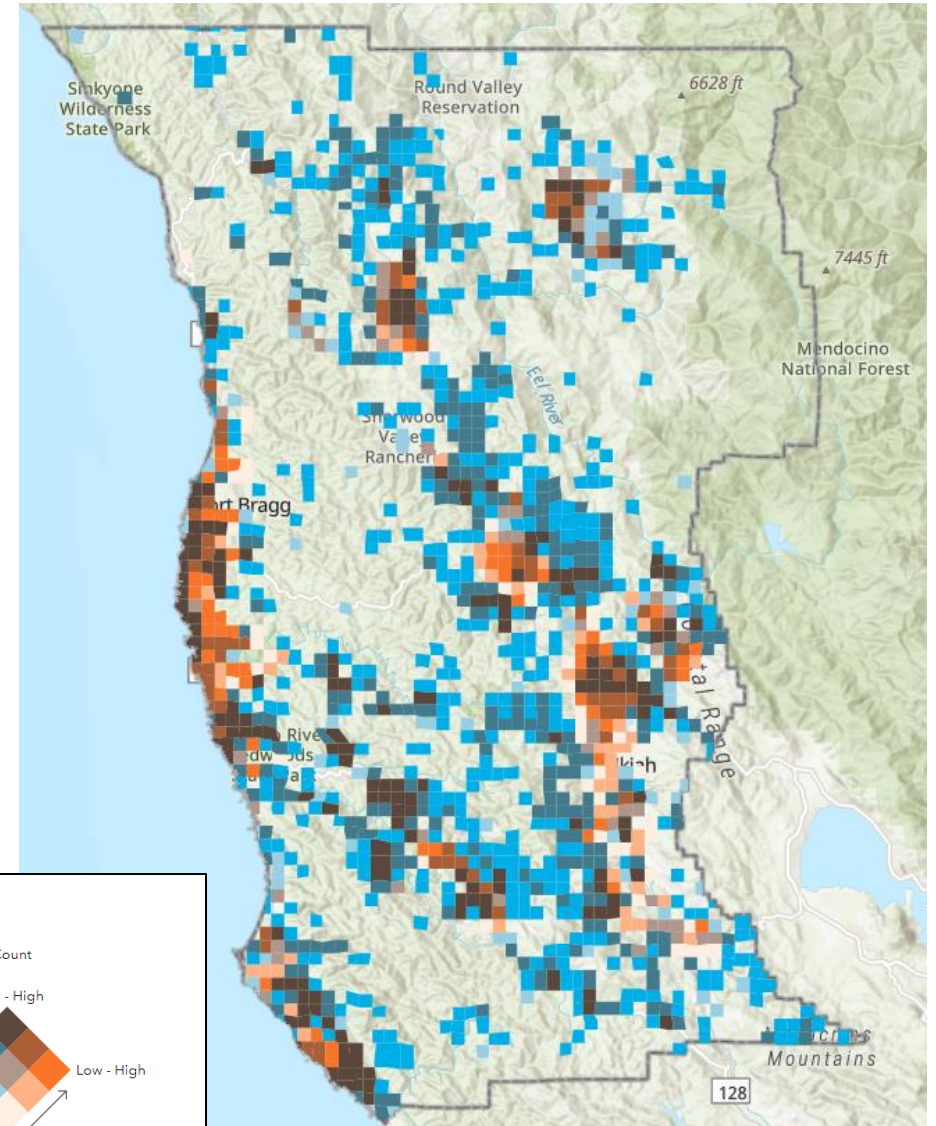
# RISK MATRIX

- Risk Categories are qualitatively described following the DWR method using state-wide percentiles.
- Domestic wells and State Smalls are largely at-risk (medium or high risk) due prominently to wildlife vulnerability, shallow depth of aquifers outside Ukiah Basin, and local groundwater quality concerns.

Asset	Count	Selected Physical Vulnerability Criteria					Total Physical Vulnerability	Total Social Vulnerability
		Household Water Outage	Dry Well Susceptibility	Groundwater Level Decline	Groundwater Quality	Wildfire		
<b>Board of Supervisors District #1</b>								
Domestic Wells	1,202	Low	High	Low	Medium	High	Medium	High
State Small Water Systems	8	Medium	High	Low	Medium	Low	Medium	High
<b>Board of Supervisors District #2</b>								
Domestic Wells	11	Low	Low	Low	Low	High	High	High
State Small Water Systems	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Board of Supervisors District #3</b>								
Domestic Wells	1,440	Low	Medium	Low	Medium	High	High	High
State Small Water Systems	7	Medium	Low	Low	Low	High	High	High
<b>Board of Supervisors District #4</b>								
Domestic Wells	1,943	High	High	Low	High	High	High	High
State Small Water Systems	9	High	High	Low	Medium	High	Medium	High
<b>Board of Supervisors District #5</b>								
Domestic Wells	3,376	High	High	Low	Low	High	High	High
State Small Water Systems	24	High	Medium	Low	Medium	High	Medium	High

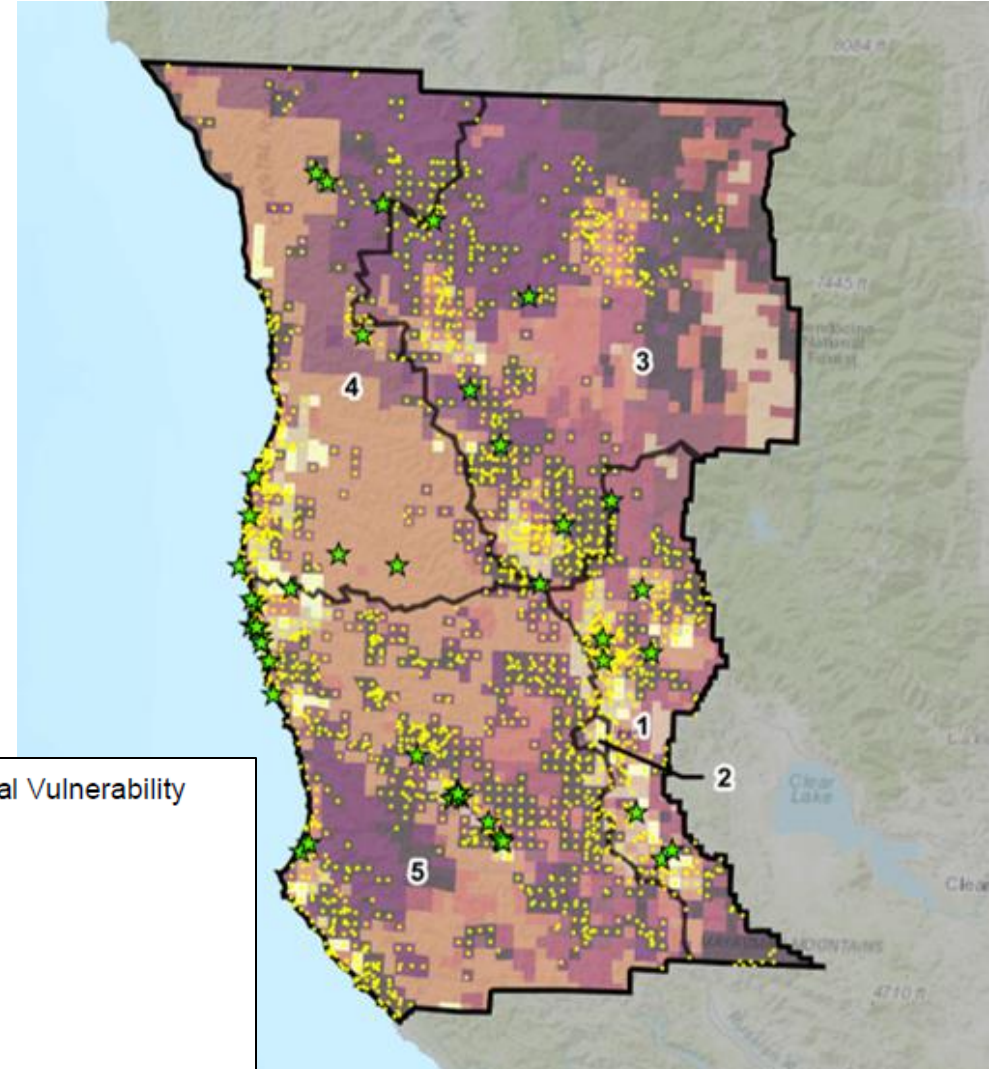
# AT-RISK DOMESTIC WELLS

- All areas mapped should be considered, however highest risk areas (dark brown) include:
  - City of Fort Bragg
  - Census Designated Places: Calpella, Talmage, Brooktrails, Covelo, Boonville, Philo, Manchester, Laytonville, Redwood Valley, Potter Valley
  - Unincorporated Communities: Mendocino (town), Pine Grove, Caspar, Whitesboro, Navarro, Fish Rock, The Oaks, Yorkville
  - Tribes: Redwood Valley Rancheria, Pinoleville Rancheria, Coyote Valley Reservation, Yokayo Tribe of Indians
- Other Areas:
  - South and East of Willits
  - Southeast of Point Arena



# AT-RISK STATE SMALL WATER SYSTEMS

- 42 state small water systems (based on an inclusive definition due data uncertainty) show high physical and/or social vulnerability to drought.
- This accounts for 88% of state small systems under the same definition.
- The percentage remains relatively the same even with more limiting definition of state small water systems.





# PUBLIC ENGAGEMENT OPPORTUNITIES



# PUBLIC ENGAGEMENT OPPORTUNITIES



DRP  
Webpage



Educational  
Material



Community  
Meetings



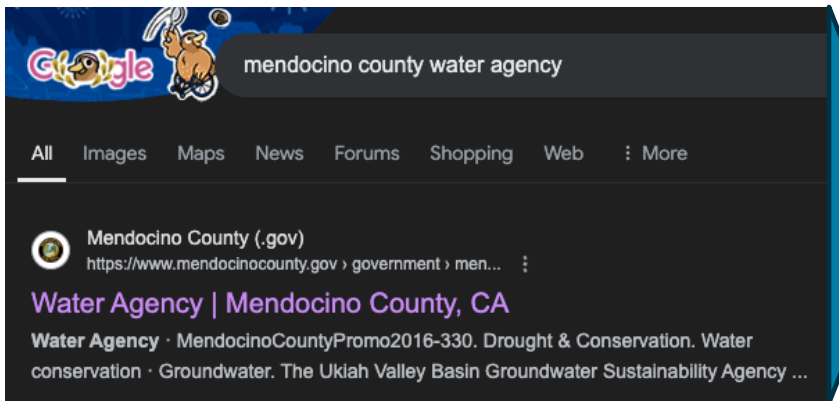
Task Force  
Meetings



Public  
Commenting  
on DRP



# 1. DROUGHT RESILIENCE PLAN WEBPAGE



## COUNTY OF MENDOCINO *California*

Government Departments Residents Business How Do I...

- Water Agency

Drought &  
- Water  
Conservation

Drought  
Funding

- Drought  
Resilience Plan

Drought  
Resilience  
Plan Public  
Engagement  
Form

Get DRP Email  
Updates

Departments » Water Agency » Drought & Water Conservation »

### Drought Resilience Plan

Font Size: [Share & Bookmark](#) [Feedback](#) [Print](#)

#### About SB 552

In September 2021, Governor Gavin Newsom signed into law Senate Bill (SB) 552 (Hertzberg), which requires state and local governments to share responsibility in planning and responding to water shortage events, particularly for state small water systems and rural communities supplied by domestic wells. Through SB 552, the California State Legislature identifies counties as the best-suited government entity to provide the needed leadership to improve water resilience for state small water systems and domestic wells.

<https://www.mendocinocounty.gov/departments/water-agency/drought-water-conservation/drought-resilience-plan>

# 1. DROUGHT RESILIENCE PLAN WEBPAGE

- Background and DRP Development Process
- Drought Resilience Plan Public Engagement Form:
- DRP Email Update Sign-up

COUNTY OF MENDOCINO California

Government Departments Residents Business How Do I...

- Water Agency

Drought & Water Conservation

Drought Funding

- Drought Resilience Plan

Drought Resilience Plan Public Engagement Form

Get DRP Email Updates

Departments » Water Agency » Drought & Water Conservation »

## Drought Resilience Plan

Font Size: [Share & Bookmark](#) [Feedback](#) [Print](#)

### About SB 552

In September 2021, Governor Gavin Newsom signed into law Senate Bill (SB) 552 (Hertzberg), which requires state and local governments to share responsibility in planning and responding to water shortage events, particularly for state small water systems and rural communities supplied by domestic wells. Through SB 552, the California State Legislature identifies counties as the best-suited government entity to provide the needed leadership to improve water resilience for state small water systems and domestic wells.

<https://www.mendocinocounty.gov/departments/water-agency/drought-water-conservation/drought-resilience-plan>



# 2. EDUCATIONAL MATERIAL

## MENDOCINO COUNTY DROUGHT RESILIENCE PLAN

The **Drought Resilience Plan (DRP)** is intended to facilitate water shortage preparedness for small water systems, rural communities, and domestic wells owners

The **Mendocino County Drought Task Force** was created to facilitate pre-disaster, during, and post-disaster responses.

The Senate Bill (SB) 552 was signed into law in 2021, mandating that counties prepare a **DRP** to facilitate drought and water shortage preparedness

The **DRP development** has 4 steps:

**1. Data Collection:** Identify State and County datasets and tools and conduct interviews and surveys in the community.

**2. Vulnerability and Risk Assessment:** Identify the areas within Mendocino county that are most susceptible to water shortages including domestic wells, homes with private surface water intakes, and state small water systems

**3. Short and Long Term Mitigation Strategies:** In coordination with water stakeholders and managers develop a portfolio of emergency actions and preventative measures.

**4. Plan Implementation:** The County **DRP** is to be implemented as a collective effort by multiple County departments and other State and local agencies.

In May 2024, the County was awarded a grant to facilitate the development of its County **DRP**, which began in June 2024



UNIVERSITY OF CALIFORNIA  
Agriculture and Natural Resources

Laura Garza, Water and Climate Change Advisor  
UC Cooperative Extension

## CONDADO DE MENDOCINO PLAN DE RESILIENCIA ANTE LA SEQUÍA

El **Plan de Resiliencia ante la Sequía (DRP)**, por sus siglas en inglés) está destinado a facilitar la preparación ante la escasez de agua para sistemas de agua pequeños, comunidades rurales y pozos domésticos causado por sequías u otras emergencias.

El **Grupo de Trabajo para la Sequía del Condado de Mendocino** fue creado para facilitar las respuestas antes, durante y después de los desastres.

El Proyecto de Ley del Senado (SB) 552 fue firmado en 2021, exigiendo que los condados desarrollen un **DRP** para estar preparados ante la sequía

El desarrollo del **DRP** tiene 4 pasos:

**1. Recolección de Datos:** Identificar bases de datos y herramientas a nivel estatal y regional; realizar entrevistas y encuestas a la comunidad.

**2. Evaluación de Vulnerabilidad y Riesgo:** Identificar las áreas del condado de Mendocino que son más susceptibles a la escasez de agua, incluyendo pozos domésticos, hogares con tomas de agua superficial privadas y pequeños sistemas estatales de agua.

**3. Estrategias de Mitigación a Corto y Largo Plazo:** En coordinación con la comunidad y con gestores de agua, se establecerán estrategias que incluyan acciones de emergencia y medidas preventivas.

**4. Implementación del plan:** El **DRP** del condado se va implementarse como un esfuerzo colectivo entre los múltiples departamentos del condado y otras agencias estatales y locales.



En mayo de 2024, el condado recibió un fondo económico para facilitar el desarrollo del **DRP**, que comenzó en junio de 2024.

UNIVERSITY OF CALIFORNIA  
Agriculture and Natural Resources

Laura Garza, Water and Climate Change Advisor  
UC Cooperative Extension

### 3. COMMUNITY MEETINGS

- Hosted by University of California Cooperative Extension (UCCE) – Mendocino County
- Purpose is to showcase what is the DRP and get community feedback
- Next workshop will be held in February 2025 (Date TBA)

— JOIN THE —  
**MENDOCINO COUNTY  
DROUGHT RESILIENCE PLAN**  
**KICKOFF MEETING**

The Drought Resilience Plan (DRP) is under development to support and facilitate drought and water shortage preparedness in our community

 September 5th, 2024  3:00 PM - 4:30 PM

 In-person: UCCE / Farm Advisor Building  
890 N. Bush St. Ukiah, Ca

 Online: Zoom

 Refreshments

**YOUR INPUT IS KEY!**

We are looking for active involvement from the community to provide insights and feedback to the DRP.

For more info contact: Laura Garza,  
UCCE Water and Climate Change Advisor  
legarza@ucanr.edu



Scan or Click to register

# 4. COUNTY DROUGHT TASK FORCE (CDTF) MEETINGS

- DRP agenda items will be presented at CDTF Meetings under the General Government Standing Committee (GGSC) or BoS meetings,
  - Open to the public

- Planned CDTF Meeting Dates:

- GGSC Meeting:

- September 25, 2024
    - January 2025 (Date TBA)
    - March 2025 (Date TBA)
    - May 2025 (Date TBA)



## 5. PUBLIC COMMENTING ON THE DRP

**The Draft DRP will be released for public comment on the DRP Webpage** following the March 2025 GGSC/CDTF meeting

- Public comment period will be up to 30 days
- Resolution to submit the Final DRP will be proposed at the May 2025 County BoS meeting



## QUESTIONS?

About the Drought Resilience Plan Overview (10 Min)



# OPEN DISCUSSION



---

# OPEN DISCUSSION

## I. Open Discussion with questionnaire (30 min)

### Activity:

Online participants – A question will pop up on your screen

In person participants – A questionnaire is provided for you to fill

We will share the overall results and open up the space for discussion, if time allows we'll share some results from the engagement form

# OPEN DISCUSSION



**I. What are your top concerns regarding water availability and management in Mendocino County during droughts? (Select all that apply)**

- Water storage capacity
- Access to drinking water
- Fire suppression
- Cost of water
- Other (Please describe)



# OPEN DISCUSSION



## 2. How should the County prioritize its efforts in developing a Drought Resilience Plan? (Select all that apply)

- Enhancing water storage
- Improving water distribution
- Providing financial assistance
- Supporting vulnerable communities
- Promoting educational resources and drought workshops
- Other (Please describe)

# OPEN DISCUSSION



## 3. What barriers do you see in accessing or managing water resources during drought conditions? (Select all that apply)

- Financial limitations
- Regulatory challenges
- Infrastructure issues and limitations (aging, inadequate, insufficient)
- Lack of information or resources
- Other (Please describe)

# OPEN DISCUSSION



## **4. What strategies do you believe are necessary to ensure water security in Mendocino County? (Select all that apply)**

Developing new water sources

Enhancing water storage infrastructure

Strengthening conservation efforts

Supporting local water agencies

Other (Please describe)

# OPEN DISCUSSION



**5. How important is it for the County to engage with various community groups, in the development of the Drought Resilience Plan? Do you find these meetings useful? What else can we do to provide more information to the community?**

Extremely important

Very important

Somewhat important

Not important

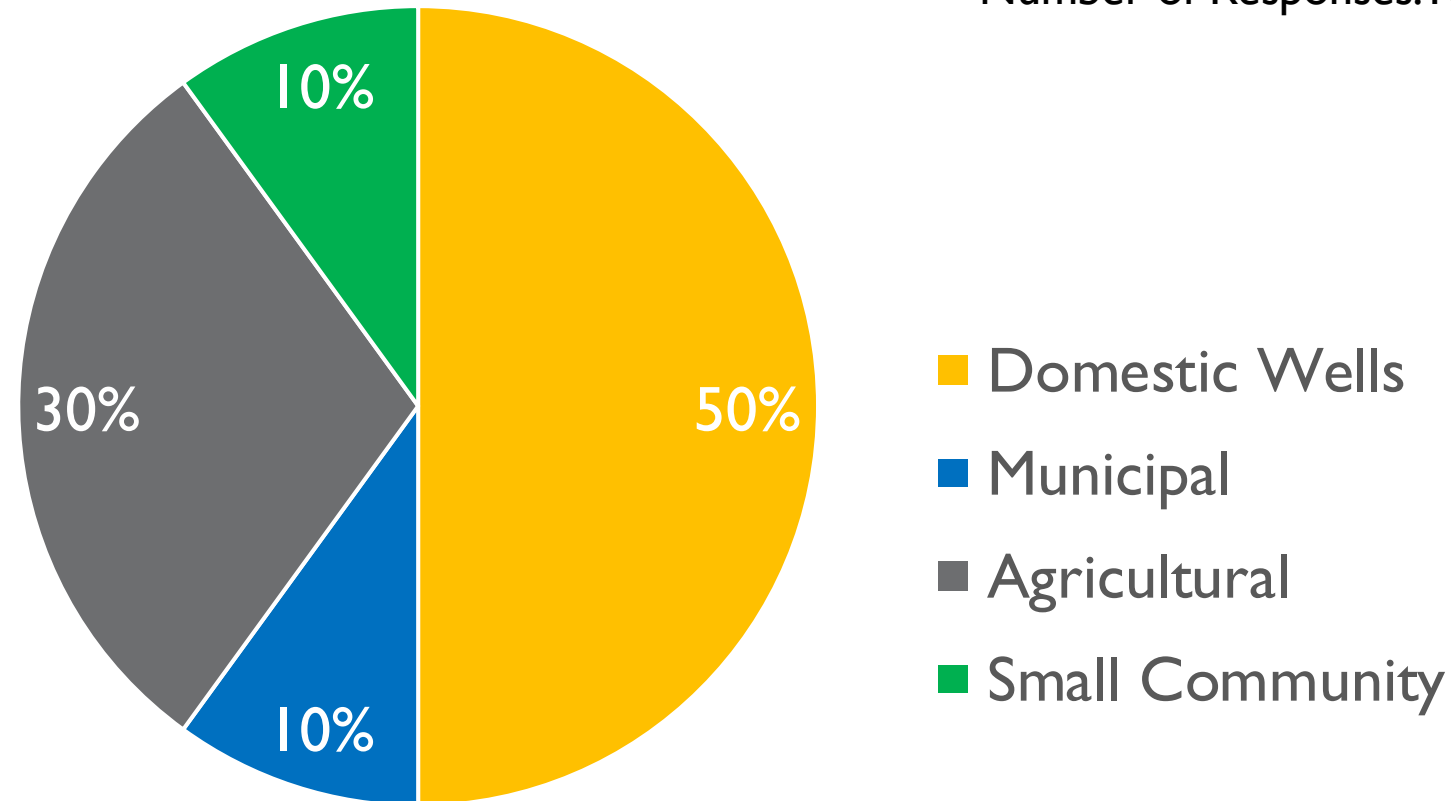


**THANK YOU FOR YOUR PARTICIPATION!**

# PRELIMINARY RESULTS FROM ENGAGEMENT FORM

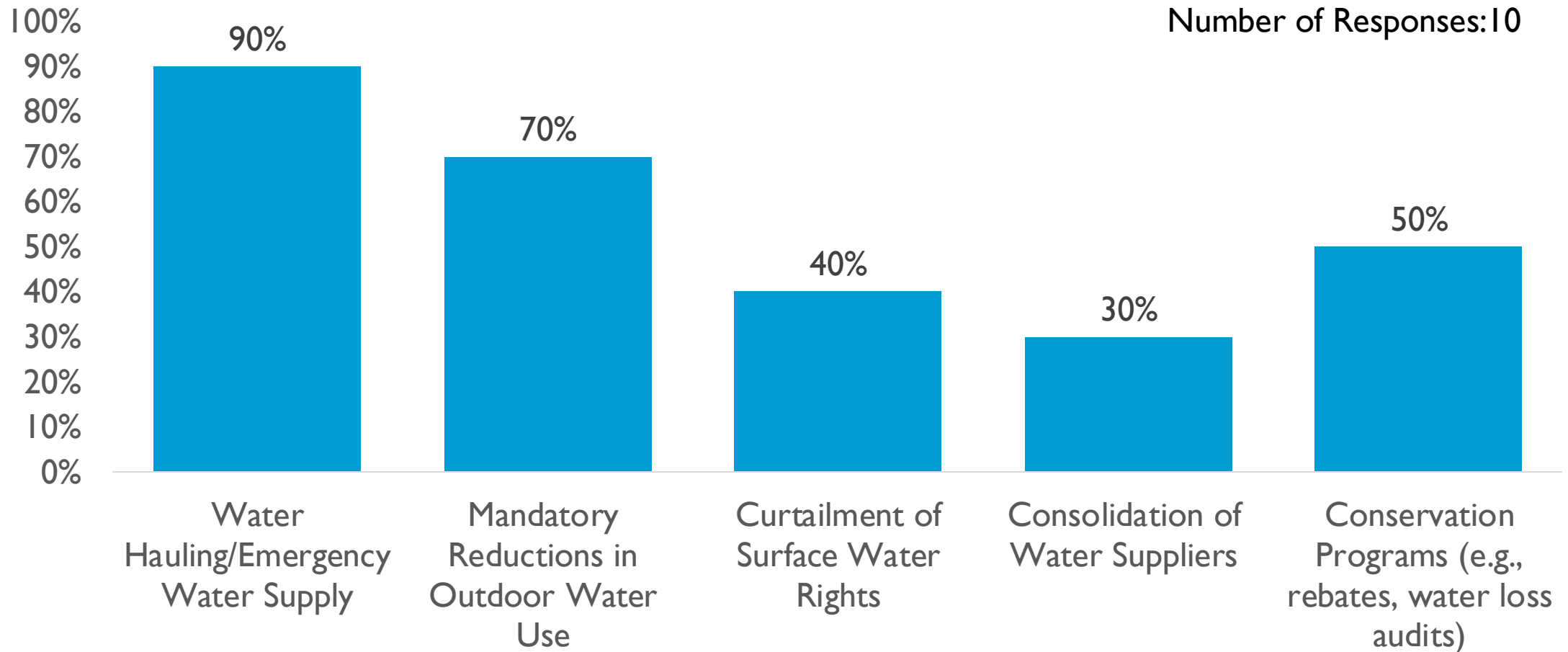
## I. What is the Primary Use of Water?

Number of Responses: 10



# PRELIMINARY RESULTS FROM ENGAGEMENT FORM

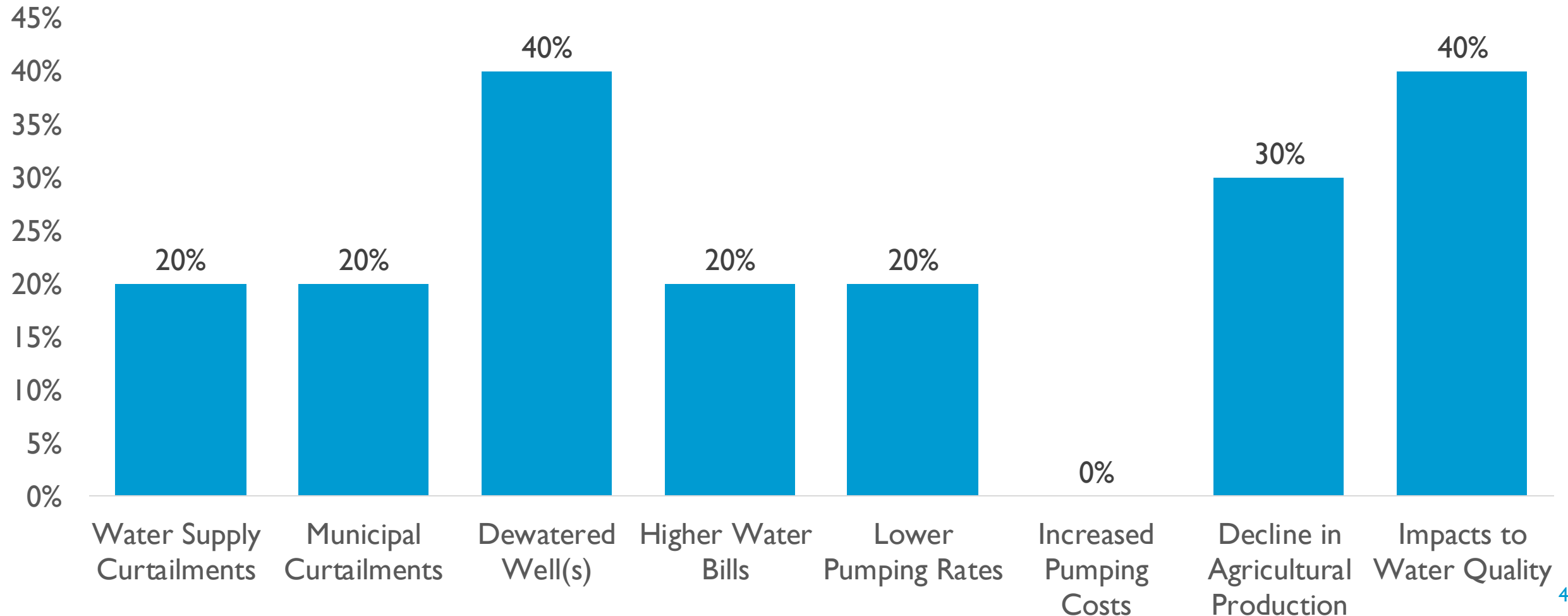
2. Which County-wide or local actions were you or your agency/organization aware of or directly engaged in during the last drought?



# PRELIMINARY RESULTS FROM ENGAGEMENT FORM

## 3. Did you experience any of the following impacts during previous droughts?

Number of Responses: 10







**THANK YOU FOR YOUR PARTICIPATION!**