



California

DRIP Collaborative

2025 Workgroup: Drought Definition and Narrative

Drought Resilience Interagency & Partners (DRIP) Collaborative

Tuesday, September 9, 2025

1:00-2:30PM PT

Remote Participation (via Zoom)

Facilitated by Workgroup Point of Contact: Anthony Navasero, PE (Anthony.Navasero@water.ca.gov)

California Department of Water Resources - Drought Coordinator, Executive Division

Meeting Information

1. This meeting is being recorded.
2. This meeting must adhere to the Bagley Keene Open Meeting Act rules. The workgroup quorum is required (4 out of the 6 on the workgroup). If we don't meet quorum, we will offer this time and this space for an informal discussion about water infrastructure and planning related to drought resilience.
3. DRIP Collaborative workgroup members must keep their cameras on during the meeting. You must notify the group if you turn off your camera and state why.
4. Members of the public and other DRIP Collaborative members are welcome to listen. A public comment session is included later in the meeting.
5. Please practice electronics courtesy and mute when not speaking.

Meeting Purpose and Agenda

Objectives: Reconvene the workgroup to review progress and ongoing efforts to address the 2023 Communications problem statement and using the I,C,L framework, determine a DRIP Collaborative pathway forward to advance drought related communications.

Meeting Agenda

- | | |
|--------|---|
| 1:00pm | Welcome, Roll Call |
| 1:05pm | Review Evolution of the Communication Program Recommendation to Today |
| 1:20pm | Potential Pathways Of Levels of Engagement <ul style="list-style-type: none">• Potential Ideas for Inform, Complement, and Lead |
| 2:05pm | Next Steps for DRIP Collaborative Meeting in October |
| 2:25pm | Public Comment |
| 2:30pm | Adjourn |

Roll Call

WORKGROUP PARTICIPANTS

(Quorum = 4 DRIP members)

1. **Tim Worley**, California Association of Mutual Water Companies
2. **Laura Ramos**, California Water Institute at Fresno State
3. **Tiffany Tran (for Katie Ruby)**, California Urban Water Agencies
4. **Suzanne Pecci**, Public Member
5. **Natalie Kuffel**, Governor's Office of Land Use and Climate Innovation
6. **Nate Ortiz**, California Office of Emergency Services



REVIEW EVOLUTION OF THE COMMUNICATION PROGRAM RECOMMENDATION TO TODAY

(15 MINUTES)

Communication Idea Development Process



In-Person Meeting



Virtual Meeting

Finalize problem statement with input from DRP

California Water Commission

October 2023

Discussion on proposed **REC**

April 2024

REC Template Parts I&II review – **Value Add** consideration discussed

July 2024

Identification of **challenges** related to recommendation

May 2025

Idea Pathway
[I, C, L]

Apr/July 2023
Problem statement development

? 2024
REC development

June 2024
REC development based on DRIP input

October 2024
DRIP input to **update REC**

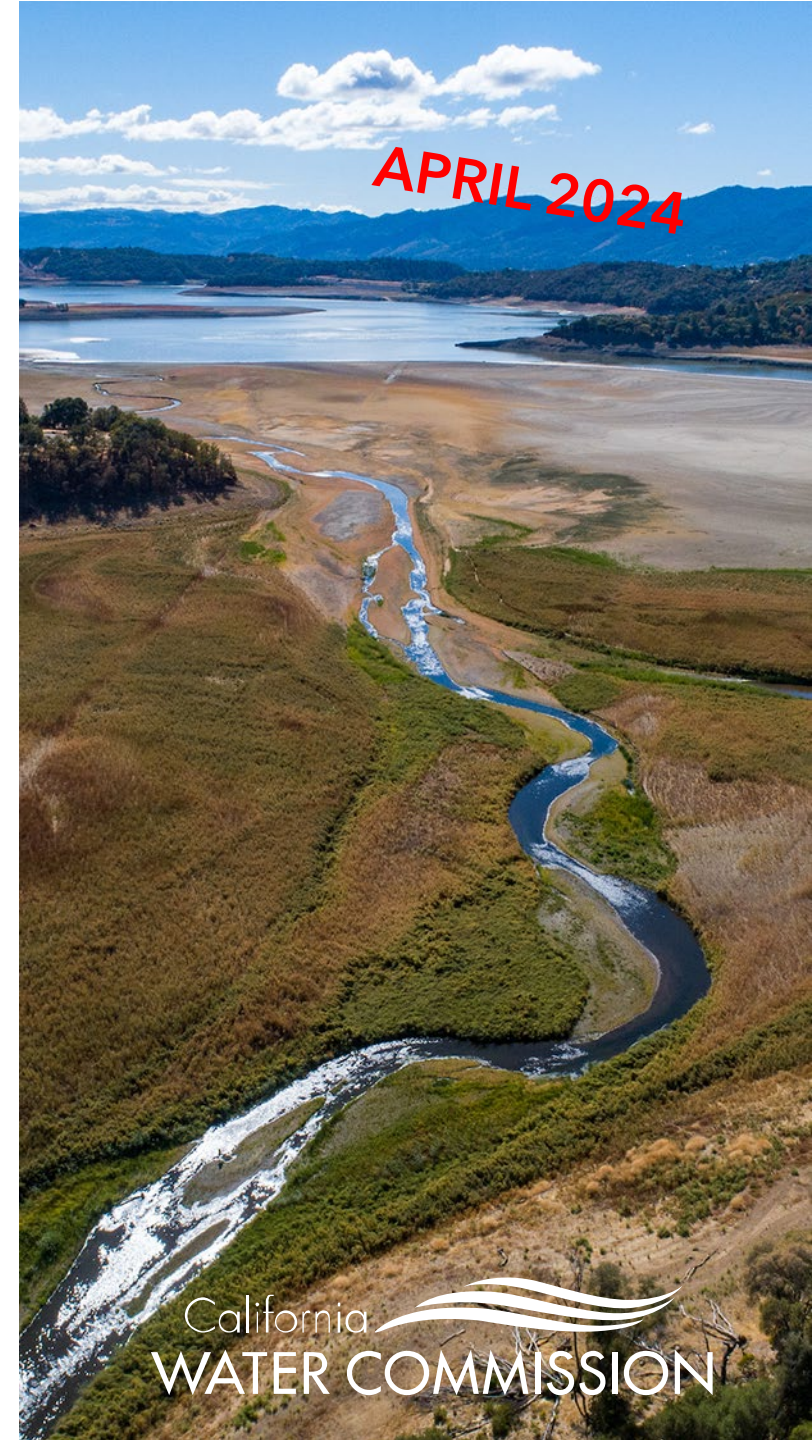
July 2024
Review of related communication programs

"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."

California Water Commission

Four key drought strategies

1. Scale up groundwater recharge
2. Conduct watershed-level planning to reduce drought impacts to ecosystems
3. Better position communities to prepare for and respond to drought emergencies
4. Support improved coordination, information, and communication in drought and non-drought years



CA Water Commission

Strategies and actions that overlap with DRIP "drought relevant data" ideas

APRIL 2024

Strategy 4: *Support improved coordination, information, and communication in drought and non-drought years*



California
WATER COMMISSION

Potential State Strategies for Protecting
Communities and Fish and Wildlife
in the Event of Drought

January 2024

- Strategy 4, Action 3: Develop consistent public information campaign to support local messaging, educate Californians about water, and to spur behavioral changes that support drought resilience
 - 3a: Continue to engage local water agencies and coordinate an inventory of drought communication campaigns by local agencies and State agencies and departments
 - 3b: Partner with leading educators, media experts, and social scientists to develop an ongoing statewide information campaign that...
 - Develops and deploys educational and informational tools with the intent of increasing Californians "water IQ" and spurring behavioral change;
 - Leverages current efforts to develop an ongoing water communication approach;
 - Provides an umbrella campaign that can be customized to meet local needs
 - Used clear and compelling messages to share information about water demand, supply, and management in California's changing hydrology, with the intent of creating a go-to information portal for public water information, particularly during times of drought
 - Revisits the use of the terms "drought" and "drought emergency" in the content of extended dry years and altered climate and introduces terms and concepts such as "aridification" and "water scarcity"
 - 3c: Develop metrics and track the campaign's impact

Problem Statement and Initial Idea

One sentence summaries

APRIL 2024

Problem Statement

Drought has many different definitions. The lack of a unified understanding of drought and water shortage impacts across sectors hinders the State's ability to respond to and prepare for drought effectively. A multitude of drought definitions and the way drought impacts vary by sector and geography leads to fragmented responses and impedes the development of true drought resilience. A comprehensive, shared understanding of drought and water shortage conditions—including physical indicators and environmental, economic, and social impacts at the regional and local level—is essential for enabling cohesive, strategic management of water shortages.

Drought Definition and Narrative

6. Drought Definition White Paper

Prepare a white paper that documents and describes various definitions of drought, including the resulting impacts.

7. Communication Program

Create a statewide, symbols-based messaging platform that can be flexibly used by water suppliers to do local adaptation and thus communicate their specific drought and water supply information.

8. Drought Case Studies

Create a suite of drought related case studies across sectors and geographies of California to highlight the complicated drought realities that diverse communities across the state are facing.

7. Communication Program

DRIP Lead: Tim Worley (CalMutuals)

Draft Recommendation Idea

APRIL 2024

Drought or other water supply conditions frequently necessitate a public response, but **effective communication has been hindered by differences in appropriate messaging due to geographic and meteorological variations, or the relative diversity of a water supply portfolio or other investments in community resilience**. Urban retail water suppliers may also specify differing communication protocols in their water shortage contingency plans, while small water providers or private well owners may receive or communicate information very differently. To address this complexity and provide accurate information with enough flexibility to allow local adaptation is a challenge that should be tackled by the DRIP Collaborative, in coordination with the Water Commission and using existing communication resources as possible. This proposal recommends **creating an understandable, statewide, symbols-based messaging platform suitable for weather reports and social media that counties and/or water suppliers can tier off to provide appropriate water supply information to their audiences.**

Example – Color Coding

Statewide

	"Fat and happy"
	"All cool!"
	Normal, everyday efficiency
	Caution: Dry Conditions
	Drought I: Voluntary saving
	Drought II: Restrictions
	Drought III: Extreme Restrictions

Local Agency "A"

	"Fat and happy"
	"All cool!"
	Normal, everyday efficiency
	Caution: Dry Conditions
	Drought I: Voluntary saving
	Drought II: Restrictions
	Drought III: Extreme Restrictions

Local Agency "B"

	"Fat and happy"
	"All cool!"
	Normal, everyday efficiency
	Caution: Dry Conditions
	Drought I: Voluntary saving
	Drought II: Restrictions
	Drought III: Extreme Restrictions

Rec #7. Communication Program

Key issues discussed during the June workgroup meeting

JUNE 2024

1. Disparate effects at a local level complicate communication; yet simplicity will be key.
2. Success will require extensive outreach for adoption, and sustained, frequent use to achieve public awareness and understanding of all water conditions.
 - Avoid “drought fatigue” but maintain vigilance.
3. Communication needs to be *direct* to elicit behavior change but requires *sensitivity* to different impacts. Color coding may be too soft in some circumstances.
4. Sources of data to underpin communication effort must be determined.
 - Conceived as top-down, but what would be needed for it to work at a local level?
 - Multiple metrics exist (e.g., reservoir and river levels), more coming with new stream gages.
 - Would this be duplicative and/or add to a confusion of existing drought communication?
 - Clear link to DRIP Rec #1 Drought Indicators and Metrics

Rec #7. Communication Program

Question for DRIP Collaborative Discussion

JULY 2024

Questions that your input would be helpful on:

- In addition to color coding (or other symbolic tool) on a dashboard/website or listserv, should messaging throughout the year be broadened to include topics on heat, climate, and related issues?
 - In addition to DWR Public Affairs, who else should be responsible to create the messages?
- This recommendation was developed primarily from a perspective of drinking water supply. Does the idea serve other audiences, such as agriculture and environmental stewards, or could it be adapted to meet other needs better?
- What is the best geographic frame of reference for the symbolic communication tool?
 - Statewide loses accuracy. Should this be done by the state's hydrologic regions?
 - Should the tool attempt to incorporate water conveyance (e.g. Colorado River, SWP) or leave it to regional and local water suppliers to disseminate accurate messaging in their areas?

Rec #7. Communication Program - Updated

OCTOBER 2024

Recommendation #7: Engage in a phased development of a communication program to improve public understanding of drought and related extremes of a changing California climate.

- ✓ Consider diverse audience and appropriate messaging based on geography, level of expertise, water supplier, related areas of concern, etc.
- ✓ Evaluate the use of existing communication vehicles, such as Save Our Water and California Water Watch (Drought.ca.gov), before investing resources in a new communication hub.
- ✓ Develop a curated information hub (website) that link appropriate messaging to diverse audiences.
- ✓ Solicit and consider audience feedback and encourage program improvement to ensure the relevancy of the communication program.
- ✓ Link the communication program to other DRIP Collaborative efforts, including Rec #1 Drought Indicators and Metrics and Rec #6&8 Drought Definitions and Case Studies recommendation

Rec #7. Communication Program - Updated

ADDED VALUE: One of the prior concerns expressed was that a communication program would duplicate existing efforts, yet the Water Commission's white paper recommends better alignment of messaging: "Align State and local communication about drought issues through the Drought Resilience Interagency and Partners (DRIP) Collaborative...."

INTEGRATION: A comment made in one of the DRIP Collaborative meetings was that possibly all (or most) of the other proposals moving forward should include consideration about communicating the results.

COORDINATION: To avoid wasting resources through duplication, but recognizing that different audiences have different information needs, this recommendation is introducing the "slimmed down" idea of a drought information hub connecting users to other existing resource sites.

OCTOBER 2024

QUESTION 1: Do Collaborative members agree with our new recommendation to begin with research on existing efforts and formulating a gap analysis to inform future development of a communication proposal?

QUESTION 2: Do members agree that the Collaborative should ask that the projects (whether undertaken by a Collaborative member or another party) should include a plan or recommendation for communication of the results?

QUESTION 3: Do DRIP Collaborative members think this role is already fulfilled in whole or in part, by an existing communication platform? Does one existing site stand out as the most likely candidate for serving this purpose?



Rec #7. Communication Program - Updated

OCTOBER 2024

1. Communication Program Recommendation

- a) Problem Statement - *"...effective communication has been hindered by differences in appropriate messaging due to geographic and meteorological variations, or the relative diversity of a water supply portfolio or other investments in community resilience... small water providers and private well owners receive and communicate information differently."*
- b) Recommendation Idea - *"...creating an [easily] understandable, statewide, symbols-based messaging platform suitable for weather reports and social media that counties and/or water suppliers can tier off to provide appropriate water supply information to their audiences."*

2. Member Feedback (2024 October DRIP Meeting)

- a) Check in on existing communication platforms such as California Water Watch and Save Our Water Campaign
- b) How do roles and responsibilities factor into communication program?
- c) Need information from the Drought Metrics and Indicators recommendation to feed into a potential communication platform - dashboard

Rec #7. Communication Program - Updated

MAY 2025

3. Challenged to formalize a recommendation

- a) No Communication workgroup meeting so far
- b) Co-leads discussion
 - I. Informed about Save Our Water Campaign and California Water Watch
 - a. No direction to a recommendation based on received information
 - II. Discuss the need to talk to other entities about their communication
 - a. Need more subject matter experts to inform and identify a recommendation's value add
 - b. Need to identify other entities, regional and local

4. Next steps

- a) Interview local/regional subject matter experts
- b) Convene the workgroup
 - I. Potentially have subject matter experts join the meeting
 - II. More applicable at regional/local level, than state
- c) Potentially revise or propose a new recommendation

Recommendation Development for a Communication Program-Updated^{JULY 2025}

1. Co-leads have met a few times
 - a) Discussion centered on identifying ideas that are value add
2. Collected communication documents on drought
 - a) Drought documents from different governments
 - 1) Federal - NOAA, National Integrated Drought Information System
 - 2) States - California and Colorado
 - 3) Water agencies - American Water Works Association
 - 4) Think tanks - Public Policy Institute of California
3. Review the collected literature

Pathways: Level of Engagement

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

INFORM EXAMPLE: Educate about an agency drought outreach campaign.

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

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

Consider:

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

Pathways: Level of Engagement - Inform

- **Inform:** Learn about and raise awareness of existing efforts.

What efforts would the DRIP Collaborative want to be more informed from drought communication implementors?

- How would the information help elevate a deeper understanding both for the members and the general public?
- What key information is important to receive?

What concerns you about existing communication programs?

- How could more information help address concerns?
- What specific information do you want to hear?

Proposed Pathways:



Inform:

Learn about best practices; how frequent and consistent; timeframes of preparation, response, and recovery.



Inform:

SME presentation on past coordination efforts across state, regional, and local levels.



Addressing the Communications Problem Statement

Problem Statement:

- Lack unified understanding
- Hinders ability to respond and prepare
- Drought impacts vary by sector and geography leads to fragmented responses - impedes true drought resilience
- Comprehensive, shared understanding - essential for cohesive strategic management

Opportunities:

1. Learn about best practices; how frequent and consistent; timeframes of preparation, response, and recovery.
2. Hear from SME on past coordination efforts across state, regional, and local levels.
3. Learn about how the state is preparing to communicate about drought.
4. Other DRIP Collaborative opportunities?

Questions and Issues Identified:

- **Who** should be targeted early in a drought communication plan?
 - What aspects of early messaging should be considered?
 - How does messaging evolve under changing conditions?
- **What** key information is important to receive (based on the audience and actions)?
 - What would the “ideal” communication program for the state be to message about drought?
- **How** would the information help elevate a deeper understanding both for the DRIP Collaborative members and the general public?
 - How are “we” preparing to communicate on the next drought?
 - How can we raise awareness and be informed by ongoing communications efforts?

PUBLIC COMMENT

NEXT STEPS

What's Next

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

- **Other DRIP Collaborative Workgroups:**

- **September 12th (PM)** – Land Use Planning Workgroup Meeting
- Other DRIP Collaborative members, as well as members of the public, may join these workgroup meetings

October 17: DRIP Collaborative meeting (in-person)

- Continue process to engage on focus areas and subtopics to identify the different levels of engagement for each.



California
DRIP Collaborative

Adjourn

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

Thank you!