# Focus Area: Drought Relevant Data

Recommendation 1: Drought Indicator and Metrics

There is a need to develop a practical drought early warning system to inform drought management actions-both proactive mitigation measures and effective emergency responses-to minimize drought impacts.

Our ability to link drought conditions and expected impacts is not sufficiently specific and actionable. Given the complexity of California's water system, it is not straightforward to understand different sectors' potential impacts, and develop drought responses. We also lack useful summary statistics to characterize drought resilience at the highest level (the type of drought metrics that might appear in every DRIP report to show our collective effort in improving our resilience). To do this, we need an improved ability to monitor and integrate that data, working across all levels including local, state, federal and tribal.

This drought early warning system should be adopted as part of a larger narrative and communication plan. How these metrics should be visualized and communicated must be considered, likely as part of a potentially updated online dashboard.

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# Focus Area: Drought Relevant Data

#### Recommendation 2: Program and Info/Tools Evaluation

Conduct an evaluation of programs and initiatives relevant to California drought issues, to ensure strategic alignment with existing federal, state or regional efforts, and rapid action to address outstanding questions.

This should include an evaluation of information gaps in drought related tools (e.g., <u>National</u> <u>Integrated Drought Information System</u>), and may include a summary of relevant monitoring or research already underway to address drought related research questions (e.g., California's Fifth Climate Change Assessment research and data products). Filling these knowledge gaps should be done strategically to uplift and complement existing efforts while leveraging federal efforts such as the NIDIS CA-NV Drought Early Warning System or other experimental drought monitoring tools (e.g. <u>EDDI</u>) and exploring partnerships with drought technical experts already grappling with drought challenges (State/non-State).

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#### **Focus Area: Drought Preparedness for Domestic Wells**

Recommendation 3: SB552 Language Update

The passage and enactment of SB552 in 2021 represented a pivotal advancement in CA drought resilience efforts. We're proposing minor adjustments to enhance the law's feasibility and implementation. The recommended amendments aim to streamline SB552, promoting effective execution by state and local governments in line with the law's original purpose.

Key revisions encompass:

- 1. Mandating each county to adopt an individual plan.
- 2. Establishing a five-year plan update deadline, synchronized with relevant updates in the General Plan Safety Element or Local Hazard Mitigation Plan.
- 3. Requiring counties to report task force status and submit plans to the State by specified deadlines.
- 4. Enforcing State review of plans, following a review approach akin to DWR's for Urban Water Management Plans.
- 5. Mandating the State to submit a comprehensive implementation report to the legislature every five years, mirroring the approach for UWMPs and AWMPs.
- 6. Including a directive for the State to appoint a staff as point of contact for county task forces, ensuring active state agency involvement.
- 7. Commissioning a legislative study, involving counties and representative organizations, to assess existing plans and task forces and understand evolving county needs.

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# Focus Area: Drought Preparedness for Domestic Wells

Recommendation 4: Community Well Monitoring Program

This recommendation is to foster the organization of local community-based well monitoring programs with the objective of monitoring domestic wells and gathering well data for inclusion in regional and statewide databases. This would be accomplished by providing technical assistance and a funding mechanism. A key element of this program would be to support domestic well community engagement by fostering education, awareness, and developing responsibility for wise water use at the individual level. Regarding education, it would aim to establish community wide understanding of the following: significance of groundwater levels, water quality, value of well maintenance and repairs, and development of funding sources.

This local effort would be a partnering opportunity between domestic well communities, GSAs, NGOs, other beneficial users, land use agencies and the private development sector. The program may also help develop and implement water policies and actions protective of local domestic well communities water levels and water quality, so that it provides proactive, funded support to domestic well communities throughout the drought lifecycle.

Notes:



#### **Focus Area: Drought Preparedness for Domestic Wells**

Recommendation 5: Roles and Responsibilities

Domestic wells are considered failing when they lack the supply and/or quality to serve their intended uses. California currently lacks a comprehensive approach to address the urgent drinking water needs of households served by failing domestic wells.

We recommend outlining roles and responsibilities of various authorities to provide short-term and long-term drinking water solutions for existing domestic wells, and comprehensive planning to limit new development in areas with failing domestic wells until solutions are reached. As part of this framework, Groundwater Sustainability Agencies (GSAs) and Nitrate Management Zones should fund interim and long-term solutions for domestic wells that have gone dry or are contaminated, or are at risk of going dry due to over extraction. Overall coordination of implementation of long-term solutions should be coordinated by the State Board through the SAFER Program.

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# Focus Area: Drought Definition and Narrative

#### Recommendation 6: Drought Definition White Paper

Drought can be defined multiple ways, leading to confusion among different stakeholders and the public. Furthermore, the term "drought" can elicit certain reactions that may not be aligned with actual water shortage conditions in a given region or community.

This recommendation is for the State to prepare a white paper that documents and describes various definitions of drought in California. The purpose of the white paper is to clarify terminology, including the resulting impacts and response actions associated with different definitions. Recommended content includes:

- 1. Literature review of existing definitions and their associated use cases.
- 2. Discussion of impacts that various drought definitions may have on key groups, such as disadvantaged communities, ecological areas, and urban and agricultural sectors.
- 3. Identification of gaps. Consider whether there is a need to broaden existing definitions to provide a more holistic, integrated view of water availability (e.g., including groundwater and surface water), reflect California's anticipated hotter/drier future, and improve drought response.

#### Notes:



# Focus Area: Drought Definition and Narrative

Recommendation 7: Communication Program

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.

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#### Focus Area: Drought Definition and Narrative

Recommendation 8: Drought Case Studies

Compile 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. Case studies may focus on drought-specific impacts to natural, built or social systems, including compounding or cascading impacts, or highlight existing approaches to addressing those vulnerabilities. This will help inform DRIP areas of focus and priority actions while capturing nuanced and diverse experiences across sectors and geographies of the state.

This compilation will help guide drought narrative developments by showcasing the range of unique and context-dependent complexities of drought related issues in California, with focus on projections for more frequent and extreme weather events and impacts. Partners should include DRIP members and collaborators representing community perspectives.

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