

Meeting Summary

Drought Resilience Interagency & Partners (DRIP) Collaborative

Summer 2026 Meeting

California Natural Resources Agency, Room 02-221A/B/C

715 P Street, Sacramento

July 17, 2026, 10:00 am - 5:00 pm

The meeting was live streamed and recorded. The recording can be viewed at:

<https://youtu.be/e2wprmB2EGs>

Meeting materials (including the presentation) are available online at:

<https://water.ca.gov/drip>.

A list of Drought Resilience Interagency & Partnership (DRIP) Collaborative members (members) is included in [Appendix A](#). The DRIP development team includes:

- Anthony Navasero, CA Department of Water Resources (DWR), Drought Coordinator
- Julie Ekstrom, DWR, Environmental Program Manager in the Water Justice Office
- Zoe Kanavas, DWR
- Kira Haynes, DWR
- Jaden Torres, DWR
- Glen Low, Earth Genome
- Orit Kalman

Contents

Meeting Objectives.....	2
Welcoming Remarks and Setting Intentions.....	2
DRIP Collaborative Member Introductions	2
Orientation to the Work of the DRIP Collaborative	3
Hydrology Report and Drought Conditions.....	3
Accomplishments Related to the 2024–25 DRIP Collaborative Recommendations	5
Roles & Responsibilities for Domestic Wells & State Smalls.....	6
Drought Indicators and Metrics	8
Prop 4 Climate Bond – Funding Opportunities	12
Department of Water Resources	12
State Water Resources Control Board.....	13
Department of Food and Agriculture	14
Next Steps & Closing Remarks	15
Appendix A. Meeting Participation.....	16

Meeting Objectives

Objective #1: Advance collective understanding of drought and water shortage resilience efforts.

Objective #2: Review progress and solicit additional input on the two priority initiatives: Roles & Responsibilities (R&R) and Drought Indicators & Metrics (DI&M).

Objective #3: Increase awareness of Proposition 4 funding opportunities and their potential relevance to drought resilience efforts.

Welcoming Remarks and Setting Intentions

Paul Gosselin, California Department of Water Resources [0:00 – 10:11, slides 1-6]

Deputy Director Gosselin welcomed attendees to the meeting, noting significant progress had been made on the two major initiatives since January. He highlighted the unpredictability of weather extremes going into next year and emphasized wet years present opportunities to improve basin conditions ahead of future droughts. He pointed to the expanded opportunity for groundwater recharge with floodwaters through [Water Code §1242.1](#), which allows parties to divert for groundwater recharge without a water right if certain requirements are met. He shared that DWR's flood management and sustainable groundwater management offices have been partnering on outreach and education for capturing flood flows for groundwater recharge. Deputy Director Gosselin also acknowledged Jeanine Jones's (Interstate Resources Manager for DWR) retirement. Jeanine Jones had been providing the standing hydrologic update to the DRIP Collaborative since its establishment in 2023. Her deep expertise in water resources and candor has been deeply appreciated by and valuable to the DRIP Collaborative. Going forward, Dr. Mike Anderson (State Climatologist for DWR) will provide the hydrology update.

DRIP Collaborative Member Introductions

Orit Kalman, Facilitator [10:11-12:39, slide 7]

New members and alternates attending the meeting introduced themselves:

Ivy McElroy, Environmental Defense Fund, Senior Analyst - Climate Resilient Water Systems

Described that her work involves supporting statewide efforts, particularly through the CA Department of Conservation's Multi-Benefit Land Repurposing Program and groundwater accounting and monitoring efforts. Her work involves working with communities and agriculturalists dealing with drought impacts and looking to repurpose their land.

Jennifer Clary, Clean Water Action, California State Director (alternate for Community Water Center)

Shared that her work is largely focused on safe drinking water and groundwater.

Sophie Morin, Association of California Water Agencies, Policy Advocate (alternate for Chelsea Haines)

Explained her issue area is largely composed of fish and wildlife, agriculture, and CEQA. She also focuses on water desalination and water recycling in regulatory settings.

Orientation to the Work of the DRIP Collaborative

Glen Low, Earth Genome [12:39 – 16:42, slides 8-11]

Glen Low provided an overview of the DRIP Collaborative's purpose and role as a forum to facilitate proactive planning and coordination across all phases of drought, including pre-drought planning, response, and recovery, and to strengthen collaboration across agencies, sectors, and water users. He traced the group's evolution: Year 1 focused on prioritizing ideas and identifying collaboration and coordination as the common thread; Year 2 built connection and communication among members; Year 3 took on large, high impact topics spanning great breadth; Year 4 has focused in on work to address near-term impacts, diving deep into the Roles & responsibility and Drought Indicator & Metric topics.

He reviewed the 2026 engagement process, noting that virtual meetings between in-person sessions (April 17, July 17, and the upcoming October 16) focus on R&R and DI&M, while inviting members to flag other urgent items for future in-person discussions. He briefly recapped the April 17 meeting, highlighting the guest presentation from a domestic well owner that grounded the R&R discussion in real experience, and noting that the DI&M conversation had covered the current landscape of drought indicators.

Hydrology Report and Drought Conditions

Mike Anderson, California Department of Water Resources [16:42 – 41:16, slides 12-28]

Dr. Mike Anderson opened by walking through the typical seasonal progression observed in California's water year: precipitation onset, peak snowpack, peak melt, and dry-down that shapes water year outcomes. He noted that while this framework holds historically, the underlying baseline is shifting, making forecasting increasingly difficult.

Hydrologic Conditions

Precipitation, Snowpack, and Temperature

Statewide precipitation is 96% of average and temperature is +4.2°F as of June 2026, tied with water year 2015 for the warmest on record. These increased temperatures are reflected in statewide snowpack, currently 0% of average peak snowpack. Dr. Anderson shared antecedent rainfall maps showing 5–9 inches of rain are still needed across the state to fully saturate soils and generate runoff, slightly drier than May 2026.

Surface Water

Reservoir storage conditions are at 106% of average levels (27.70 MAF), supported by early-season storms. Despite early snowmelt, the reservoirs have been managed

carefully to maintain our supplies into the dry season. Dr. Anderson pointed members to the [California Water Watch](#) for tracking these conditions.

Groundwater

Groundwater conditions show 28% of monitoring wells below normal levels, with 33 dry wells reported year-to-date. Dr. Anderson highlighted [CalGroundwater Live](#) as a resource.

Water Project Allocations

The State Water Project allocations are 45% of contract requests. Central Valley Project allocations vary by region: North of Delta allocations are 100%; South of Delta allocations are 20% for irrigation and 70% for municipal and industrial (M&I); and In-Delta allocations are 20% for irrigation and 100% for M&I.

Colorado River Outlook

Water year 2026 produced the lowest snowpack on record in the Colorado River Basin, requiring changes to Upper Basin storage operations to maintain power generation at Lake Powell.

Conditions Outlook

Dr. Anderson emphasized understanding how extreme events in one part of the water year affect outcomes later on. One aspect is whether the water year starts on time; the longer the dry season extends, the more impacts begin to manifest. He explained how El Niño conditions flatten and accelerate the jet stream, displacing it southward and bringing faster-moving storms, greater coastal damage risk, higher sea levels, and marine ecosystem stress. Reviewing past strong El Niño years, he showed that outcomes for statewide precipitation and April 1 snow water equivalent varied widely, particularly for Southern California. He noted that forecasting can't provide a precise outcome, but it can help point toward the more likely range of outcomes. He emphasized throughout to do the best with available information and carefully document outcomes, as these "abnormal" years serve as an important observational basis for improving future models.

Comments provided by DRIP Collaborative members:

- A member asked whether the strength of this year's El Niño, combined with current climate conditions, raises concern about approaching a global tipping point, particularly regarding impacts to the jet stream and other global systems.
 - Mike noted that the climate system is non-linear, so added heat doesn't produce proportionally predictable outcomes. Some regions will likely see record-setting and significant impacts, but the research community is still building the ability to anticipate these moments.
- A member noted that while overall reservoir storage is in good shape, many rural communities, including some Tribes, rely on raw surface water rather than stored water. Given this year's low snowpack and early snowmelt, surface water availability is quite limited, affecting both these communities and ESA-listed fish species.

- A member added that this inter-seasonal variability underscores the need to actively administer water rights year-round, not just during declared drought years. He noted that in March, hydrologic conditions did not support fulfillment of all water rights, and that more active, real-time administration (as practiced in other Western states) would better align water rights with actual hydrologic availability.

Accomplishments Related to the 2024–25 DRIP Collaborative Recommendations

Julie Ekstrom, California Department of Water Resources [41:16 – 1:09:24, slides 29-34]

To follow up on the 2024–25 recommendations, DWR shared updates on implementation progress based on input from DRIP Collaborative members, state agencies, and partner organizations working on related efforts. Below is the progress to date on the six 2024 recommendations:

1. **Drought indicators and metrics:** UC Davis project (led by Prof. Alvar Escriva-Bou) expanding – this is discussed further in [the Drought Indicators & Metrics section](#); [NIDIS SoCal pilot](#) expanding to statewide, more detail to come in Fall 2026; DRIP Collaborative workshop series is underway.
2. **Rapid inventory of drought-related tools and resources:** LCI's ICARP Climate Services is documenting drought related tools and data; output is hosted on the [Vulnerable Communities Platform](#) (VCP).
3. **Empowering county drought resilience planning for domestic wells and state small water systems:** DWR direct assistance and grants for county drought resilience plans (CDRP) and task forces are complete; DWR-CSAC host monthly webinars to support county needs/interests; DWR is developing toolkit of commonly requested resources and templates from counties to support CDRP implementation.
4. **Voluntary community based well-monitoring program:** DWR-supported pilot expanded through DWR region offices. Participation to date includes 47 domestic well owners, 30 NTNC schools, and 42 small systems, supported by partnerships with region offices and Self-Help Enterprises.
5. **Roles and responsibilities for domestic wells:** DRIP Collaborative workshop series is underway – this is discussed further in [the Roles & Responsibilities for Domestic Wells and State Smalls section](#).
6. **Drought definitions and case studies:** LCI including case studies of community drought experiences as part of State's Fifth Climate Change Assessment. Drought related content may be featured at the Climate Resilience Summit in October.

Below is the progress to date on the three 2025 recommendations:

1. **Instream Flows: Best Practices for Landowner Cooperative Solutions:** No reported progress.
2. **Housing Needs in Reflection of Capacity of Water Supply and Wastewater Infrastructure:** A UCLA Luskin Center for Innovation Master's thesis has developed and applied a statewide method to address this; potential future presentation to the DRIP Collaborative.

3. **Alignment Assessment and Guidance of Housing and Water Planning:** Early discussions between LCI and DWR continue as LCI develops its General Plan Guidance.

Below is the progress to date on 2025 complimentary efforts that are related to the work of the DRIP Collaborative, but were not advanced as recommendations:

1. **Integrate Water into Land Use Planning:** LCI is developing guidance for an optional water element in its next General Plan Guidance Update.
2. **Guidance to Integrate/Align Drought Planning:** Early internal discussions.

Orit asked the members if they had updates or progress to share toward these recommendations.

- Reported joining the Capital Region Climate Readiness Collaborative, engaging the City of Elk Grove on domestic well monitoring and land use coordination, and planning to bring water banking and county drought planning updates to a subbasin advisory committee.
- Described LA County's 2023 One Water Plan and a task force that produced a draft small water systems support framework, highlighting funding and technical assistance needs that echo prior listening sessions.

Questions from the DRIP Collaborative:

- A member asked why the 2024 water infrastructure focus group discussions did not appear on the recommendations list.
 - Anthony clarified that several workshops were held, but no formal recommendation emerged. Julie noted we can add that topic back to this section and leave space for folks to provide updates related to infrastructure-related implementation.
- A member asked if the well monitoring pilot could expand to additional small communities or domestic wells outside current service areas (e.g., through RCAC).
 - Zoe responded that initial program funding has been fully committed, but open to discussing future expansion.
- Several members raised concerns about the upcoming SAFER program funding cliff and the need for a more secure, sustainable funding source, including a suggestion for a domestic well vulnerability assessment be conducted, and that domestic well funding should be structured independently from public water systems.
 - The State Water Board noted that the Board has invested \$12 billion since 2019, but funding will be reduced, and suggested a state revolving fund model (versus bond financing) as a more sustainable long-term approach, tied to an updated needs assessment.
 - Another member noted that new legislation on low-income water rate assistance: [SB 1125 \(Menjivar\)](#).

Roles & Responsibilities for Domestic Wells & State Smalls

Orit Kalman, Facilitator [1:09:24 – 2:07:18, slides 36-58]

This initiative stems from the 2024 DRIP Collaborative recommendation of Roles and Responsibilities for Domestic Wells and State Smalls, which calls for understanding, analyzing, and clarifying roles & responsibilities at the state and local level. The DRIP Collaborative is advancing this work in two steps: Step I focuses on understanding current roles, responsibilities, and gaps; Step II (to be worked on in 2027) will focus on gap prioritization and solutions.

At the April 2026 DRIP Collaborative meeting, members reviewed outputs of the first workshop: a [draft primer](#) outlining roles and responsibilities by entity and [an inventory](#) on relevant laws, programs and resources. Zoe shared updates to the primer incorporating feedback from the April meeting, including call-out boxes on relevant statutes in each section, additional water quality-related entities, and narrative refinements to better reflect members' lived experience; the revised primer is currently under review and will be shared once finalized.

In May 2026, the [second workshop](#) focused on response, advancing the work through a detailed analysis of local plans and programs. for more detail. Julie presented on this local analysis, which followed four steps: (1) identify the study area – focus on areas with highest concentration of reported dry wells, (2) identify relevant planning resources – four source documents were used in this analysis: County SB 552 drought resilience plans, domestic well mitigation plans from Groundwater Sustainability Agencies (GSAs), the State Water Board's well testing map inventory, and county water quality capacity assessments developed by OEHHHA for the SAFER risk assessment process, (3) compile the documents – compile information from these sources to identify elements and coverage, and (4) assess key elements to identify availability and gaps – after identifying key elements addressed throughout the source documents (e.g., water hauling, dedicated filling stations, expedited well permitting) note their status (e.g., available, proposed but contingent on outside funding, deferred to GSA). Compiling the information to show the key elements and their availability status allows us to start to see the coverage/gaps in services for domestic wells and state smalls.

Orit noted that this process validated several known challenges: plans and supporting documents are often difficult to find and access, major gaps exist in fractured rock areas, and availability findings are a single point in time that doesn't capture whether a program has resources to operate in practice or depends on outside funding. Workshop 2 participants nonetheless affirmed that the effort is worthwhile and should be expanded statewide.

Two members shared reflections from Workshop 2 for this effort, highlighting the wide variability in the scope of responsibility counties have taken on, and the need to clarify shared definitions and terms (particularly around what constitutes a drought and how

eligibility is determined). They also raised the importance of accounting for financial sustainability as a gap in itself: a service that depends on time-limited outside funding is not a durable solution, even if it appears to be available today. Members also discussed Tribal engagement, noting that many Tribal community rely heavily on groundwater, and that both federally- and non-federally recognized Tribes should have access to relevant funding and support.

Members then broke into three small groups two discuss: (1) how can we ensure the statewide analysis reflects local conditions, and (2) what review process should be used to validate the analysis. Themes from the report-outs included:

- Other sources to consider for inventory: CV-SALTS, ILRP, climate action plans, salt and nutrient management plans, nitrate management zones, special/regional projects (e.g., local recycled water projects), and emerging topics like groundwater banking.
- Interest in capturing local entities' willingness/capacity to take on coordinating roles.
- Include the private sector and federal assistance programs.
- A related concern raised: the need to avoid perpetuating supply gaps by permitting new wells in areas where wells are already going dry. Housing growth in areas reliant on domestic wells affects the vulnerability of existing groundwater users.
- Recommendations for local outreach: engage trusted regional entities and forums (e.g., Self Help Enterprises' Technical Advisory Committee, North Coast Regional Partnership); prioritize Tribal outreach; ensure language access broader views.
- Local expertise is critical to interpreting plans. In some cases, multiple plans point back to a single underlying county drought response plan that is itself contingent on outside funding; Resource Conservation Districts (RCDs) are a key local resource.
- Regional variability in climate and precipitation patterns affect how drought is reflected on paper versus experienced locally.
- A reminder to ensure domestic wells in fractured rock areas are captured as non-basin areas are not covered in SGMA planning.

This feedback will be used to expand the plan analysis statewide. Ultimately, this work will be documented in a white paper addressing: (1) who is responsible for existing programs; (2) what current programs and initiatives are supporting; (3) what can be learned from existing programs (what works/is missing); and (4) what expertise, funding, and institutional resources are available. This white paper will close out Step I of this work. Step II will convene regional workshops with counties and GSAs to validate findings and identify gaps/potential solutions; progress will be reported back to the DRIP Collaborative.

Drought Indicators and Metrics

Glen Low, Earth Genome [2:07:18 – 3:30:00, slides 63-110]

This topic comes from the 2024 DRIP Collaborative recommendation on drought indicators and metrics, which calls for the development of a practical drought early

warning system to improve local and state drought management decision making. The vision for this work is to build on existing drought indicator work to improve how indicators are used, communicated, and connected to decisions and outcomes. To get at that, the work has been focused on the different audiences or users of drought indicators, including agriculture, water agencies, state or local government, media, and more. The work will be documented in a white paper covering the current landscape, a gap and opportunity analysis, and a roadmap addressing funding, roles, and governance questions.

Glen recapped the progress to date on this topic. Across Workshops 1 and 2, eight subject matter expert presentations were given, ranging from California-specific early warning dashboards and sector-specific pilots to tools assessing vulnerability, financial impacts, and outage risk for water systems, and AI-driven drought forecasting incorporating vulnerability and coping capacity. Workshop 2 also featured a review of select scientific articles that describe California drought indicators and highlighted a finding from a survey of western state drought managers that 16 of 18 states with an existing drought plan did not use their own indicators as they were not representative for their state. This demonstrates that not all gaps for drought indicators are necessarily that indicators don't exist, but could also include gaps in use, frequency in calculation, reliability, and communication. The April DRIP Collaborative meeting introduced the four-category indicator framework used in this work: risk (covers hazards, exposure, and vulnerability), thresholds, actions, and impacts. Glen shared sample indicators across these categories; an extended list is available [from Workshop 2](#). One member emphasized that federal actions (e.g., USDA's Emergency Community Water Assistance Grant program) and increased O&M costs in rural communities need to be captured in the indicator inventory.

Workshop 2 introduced the approach for the user needs analysis. The purpose is to gather actionable, user-specific input on which indicators would most directly improve decisions and reduce drought-related impacts. The process starts with the identified user types (e.g., counties, media, etc.), works to understand each's specific needs (decision to improve, possible impacts, missing indicators, etc.), and searches for shared patterns across user types to identify the highest multi-benefit opportunities. Glen noted this approach is designed to complement other user needs efforts and gave updates on both. Professor Alvar Escriva-Bou from UC Davis is developing a drought early warning system for California, presented in a public web-based dashboard. Alvar's work is focused on strengthening the link between risk indicators and the impacts they're meant to predict. The next phase of the work will convene five audience-specific groups (science, cities, rural communities, agriculture, ecosystems) to identify key decisions users made and design sector-specific views of the dashboard. To complement this effort, the California Water Data Consortium is conducting a parallel effort with counties, media, large urban suppliers, state agencies, and environmental managers, conducting interviews and focus groups to better understand their needs related to drought indicators. The Consortium will start with counties and expect to have

a draft memo prepared by September 2026; the process for the other user groups will extend into 2027.

Zoe then presented on the National Academies' recent consensus study report: [Improving Future U.S. Drought Assessment](#). The report's central concept is non-stationarity: as climate change shifts the historical baseline drought is measured against, fixed reference periods increasingly misclassify current conditions. Building on this, one of the report's major conclusions is that indicators need strong, established relationships to the impacts they're meant to signal; this finding closely aligns with the vision for and motivation behind the DRIP Collaboration work on this topic. The report goes on to explain why no comprehensive drought impact reporting system currently exists, pointing to gaps in timescale, spatial scale, and how data is collected and distributed; these are the same gaps the Collaborative has identified and built directly into its user needs assessment process.

Dr. Amanda Sheffield and Dr. Andy Hoell of NOAA/NIDIS joined virtually with two updates. First, their drought early warning system pilot (to date focused on Southern California) is gathering feedback ahead of an expansion to all of California and Nevada, targeted for launch in Fall 2026; they invited members to join upcoming listening sessions as that expansion is shaped. Second, on drought indicators more broadly, NIDIS-funded NASA machine learning research identifying leading drivers of drought has recently been completed and posted on [drought.gov](#), including California- and Nevada-specific findings. NIDIS is now working region by region (California/Nevada not yet included) toward a white paper on indicator relevance by season, drought type, and sector.

Glen then presented a media analysis on the 2012-2016 drought conducted by Iris Badezet-Delory from the University of Chicago. The study reviewed coverage from seven California outlets, reviewing >700 articles that substantively mentioned drought and tallied 890 total indicator mentions across the four categories. Risk indicators made up the largest share (42.6%), followed by actions (31.3%), thresholds (13.8%), and impacts (12.2%). Glen and members reflected that impacts often aren't captured until well after the fact, so real-time reporting understates them, even though it's still worth understanding what can be known in the moment; and because the study specifically counted mentions of impact indicators, it wouldn't have captured articles that conveyed an impact through someone's personal story rather than naming a metric. The analysis also looked at coverage by geography, finding that volume of coverage by outlet varied substantially and, to a lesser extent, the coverage of specific categories varied. The Risk and Action categories dominate across most outlets, however, the Sacramento Bee had a stronger emphasis on thresholds, while the LA Times and OC Register reported on urban conservation actions such as water-use cuts, irrigation restrictions, surcharges, and turf rebates. The analysis reviewed coverage by month, finding alignment with the typical water year cycle: concentrated in the winter and early spring months when precipitation and snowpack data are most salient. Looking across the full 2012–16 timeline, coverage spiked around drought emergency declarations and

executive orders on urban water conservation. When overlaid with U.S. Drought Monitor severity data, the analysis found several periods where the most severe drought ratings coincided with the lower levels of media coverage. Glen also shared that, based on a preliminary scan of articles from the 2020-22 drought, coverage is more social-media-adapted and more connected to climate change, heat, and wildfire.

Comments from the DRIP Collaborative:

- Several members reflected on how media coverage and drought framing have shifted since 2012–16: one noted the wildfire linkage in the analysis stood out given how prominent that connection has become; another observed that 2020–22 coverage looked markedly different, partly because COVID was competing for public attention, and that some now-common concepts (e.g., subsidence) simply weren't part of public discourse yet during the study period. Members also cautioned that some indicators now considered standard (e.g., groundwater sustainability plans) didn't exist during 2012–16, and suggested the outlet mix and methodology should be revisited before drawing conclusions for current strategy.
- A member emphasized that environmental and public health impacts are interwoven, particularly in Tribal communities such as the Yurok Reservation, where the Klamath River serves as a primary food source, and noted surprise that harmful algal blooms received zero mentions despite being a persistent regional issue.
- A member pointed out a disconnect between media coverage and major concurrent policy activity, noting that SGMA negotiations and early SAFER discussions received little media attention despite their significance at the time.
- A member shared that their local paper often ran snowpack-focused stories, despite that not being relevant to their community's water supply. Also flagged affordability and rate impacts as an indicator to explore.
- A member shared their experience of receiving calls from residents whose wells weren't going dry but were concerned due to news coverage.

Members then broke into three small groups to discuss: (1) next steps for the media analysis and user needs work, and (2) what gaps and opportunities should be further assessed and described in the white paper. Themes from the report-outs included:

- Ask users what they wish they knew before the last drought.
- Interest in a more current media analysis, given media changes (where people get information, local media's shrinking footprint, growing polarization).
- Recognition of this group's role as a resource for media, and of media's dual role as both a needs-assessment audience and a delivery mechanism.
- The messenger and trust factor matter: for many communities, especially rural ones, the first instinct isn't to go to the county, local leaders carry more weight.
- Impacts are hyperlocal, making them harder to report on consistently, and linking impacts back to underlying risk indicators will be important.
- A reminder that what elected officials read strongly shapes what actions get taken.
- Need for info that is accessible, applicable, and locally relevant, not just statewide.

- Interest in the role of emergency managers and crisis communications, including tying drought messaging to concurrent events communities are already tuned into.
- Interest in communication campaigns and social media toolkits (including multilingual versions) as tools for outreach.
- Dissemination approaches should account for differences in community size and type.

This feedback will be incorporated into the white paper, which will build on the full body of work to date. DRIP Collaborative members are invited to volunteer to review and provide feedback on the draft. The white paper will be reviewed and discussed at Workshop 3.

Public Comment

- Suggest soil health be incorporated into the work, both as an early indicator of drought risk and as a nature-based solution with co-benefits for water availability, water quality, public health, and drought resilience.

Prop 4 Climate Bond – Funding Opportunities

Department of Water Resources

Jule Rizzardo, California Department of Water Resources [3:30:00 – 3:41:43 slides 112-120]

Jule presented an overview on Proposition 4, the Safe Drinking Water, Wildfire Prevention, Drought Preparedness, and Clean Air Bond Act of 2024, that authorizes \$10 billion in state general obligation bonds to reduce climate risks and impacts. Eligible recipient types include public and local agencies, nonprofits, special districts, joint powers authorities, tribes, public utilities, and mutual water companies. At least 40% of total funds must support vulnerable populations or disadvantaged communities, and at least 10% of total funds must go to severely disadvantaged communities. Vulnerable population is defined as a subgroup within a region or community that faces higher climate risk and has fewer resources to cope; see [LCI's VCP](#) for more information. Disadvantaged communities' definition has been expanded to include areas with less than 80% median household income (for CA) or less than 80% of area average.

Jule expanded on the \$2 billion of Prop 4 allocated to DWR, covering two overarching programs: the Watershed Resilience Program and the Sustainable Groundwater Program. The Watershed Resilience Program provides \$152 million for integrated planning and multi-benefit solutions that increase climate resilience; it builds on IRWM, supporting regional watershed networks for coordinated resilience, habitat, and water security. The Sustainable Groundwater Program provides \$320 million for ecosystem and nature-based solutions, such as groundwater recharge, to improve regional resilience. Within that program, \$3.5 million is set aside for small Groundwater Sustainability Agencies (pump <10,000 acre-feet/year) to help smaller agencies pool resources and coordinate regional interests. This funding will be administered first, with guidelines released for comment in August 2026. A public scoping workshop was held April 30 (recording available [here](#)). Draft guidelines are under development through

summer 2026 and will be out for public comment and workshops in fall 2026. Final guidelines are expected winter 2026, with the application period opening spring 2027. DWR's Financial Assistance Branch can be reached at financialassistance@water.ca.gov.

Questions provided by DRIP Collaborative members:

- A member asked whether the timelines reflect the signed bill on APA exemptions.
 - Jule responded that the Watershed Resilience and Sustainable Groundwater programs (and other Prop 4 programs) are exempt from the APA process.
- A member asked where technical assistance fits in, particularly for severely disadvantaged communities.
 - Jule responded that \$6.5 million in technical assistance is tied to the small GSA funding rollout, and is also intended for Tribes.
- A member asked whether the \$3.5 million small GSA pot is for planning or implementation.
 - Jule responded that the language in Prop 4 is broad on this point; her read leans toward planning/coordination readiness, though this will be clarified later.
- A member asked how DWR is addressing Tribal sovereignty and access to funds.
 - Jule responded that DWR is carrying over a specific term and condition originally developed at the Water Board, which will appear in draft guidelines and be refined through tribal and public workshops. DWR Tribal Affairs Office added that Tribal info meetings are being held alongside the public comment period.

State Water Resources Control Board

Lisa Hong, State Water Resources Control Board [3:41:43– 3:52:11, slides 121-128]

Lisa presented on Water Board funding opportunities relevant to DRIP's work, covering water recycling, stormwater, wastewater, drinking water, technical assistance, and bottled water. Water recycling and stormwater are funded directly through Prop 4. Prop 4 allocated \$386 million for water recycling, of which \$130 million remains; construction grants are available up to \$15 million per project, and large-scale projects (10,000+ acre-feet) can receive up to \$15 million per phase, with 2 phases maximum, on a continuous application basis. For stormwater, Prop 4 allocated \$101 million through a custom solicitation; a workshop on the funding guideline was held July 21, and projects must be included in a Storm Water Resource Plan (SWRP) and be multi-benefit.

Wastewater grants support small disadvantaged communities for planning and construction, currently prioritizing violations and septic-to-sewer projects, while other communities can access low-interest loans (~2%) up to \$50 million per project. Drinking water grants similarly support failing and at-risk systems, with an additional pot for emerging contaminants (PFAS, 1,2,3-TCP, manganese, 1,4-dioxane, etc.), and loans are available for all other projects. Technical assistance is available to support communities with drinking water and wastewater projects, and bottled water funding is

available as an interim solution for very small systems with acute water quality exceedances.

Lisa closed with advice for pursuing Water Board funding: be shovel-ready for construction (CEQA, engineering design, financing), submit an initial application early to be assigned a dedicated project manager, review applicable guidelines closely, confirm fund expiration dates are workable, and keep planning work moving forward for future funding tranches given expected demand.

Questions from DRIP Collaborative members:

- A member asked whether domestic well funding is still supported under Prop 4.
 - Lisa responded that if a use is eligible under the Water Board's Intended Use Plan, it continues to be eligible.
- A member asked, for septic-to-sewer consolidation projects, who is typically the lead applicant when organizing a group of individually-septic properties?
 - Lisa responded that the applicant can be the association currently on septic systems or the system absorbing the connections (e.g., a sewer district), and that the project needs to make engineering sense as a consolidated unit.

Department of Food and Agriculture

Scott Weeks, California Department of Food and Agriculture [3:52:11-4:17:53, slides 129-135]

Scott presented the \$195 million Prop 4 allocation for CDFA, covering the State Water Efficiency and Enhancement Program (SWEET) and the Healthy Soils Program. SWEET provides \$40 million to help farmers and ranchers reduce greenhouse gas emissions and conserve water through climate-smart irrigation technologies. Eligible practices include irrigation water management, efficient irrigation system upgrades such as drip irrigation, retrofitting for lower-pressure components, pump repair/replacement, and fuel efficiency or renewable energy upgrades to pumping systems. The Healthy Soils Program provides \$65 million to support soil health practices that sequester carbon and lower agricultural GHG emissions. Eligible practices include organic soil amendments, annual plantings, permanent plantings, and decreased tillage.

Both programs use the block grant model through CDFA's Office of Agricultural Resilience and Sustainability (OARS). Producers no longer apply directly to CDFA; instead, they apply through a local Block Grant Recipient (BGR), which provides one-on-one technical assistance and sets its own application process, timeline, and service area, meaning eligibility depends on having a BGR in your area. Both are in the full proposal stage; proposals are due August 14, with awards anticipated January 2027 and grower applications to BGRs expected in spring/summer 2027. CDFA's OARS office can be reached at cdfa.oars@cdfa.ca.gov or www.cdfa.ca.gov/oars.

Questions from DRIP Collaborative members:

- A member asked whether a cultural fire project focused on soil moisture and food sovereignty (in a non-agricultural sense) would qualify under Healthy Soils.

- Scott noted CDFA is doing a Tribal set-aside for cultural burning. The Healthy Soils Program Tribal set-aside will have a separate solicitation from the rest of the program, set to open in early 2027.

Next Steps & Closing Remarks

Orit Kalman, Facilitator [4:17:53-4:45:52, slides 137-141]

Upcoming engagement opportunities were shared, including:

- Roles and Responsibilities Workshop #3 – Monday, August 24, 2026 (1:00PM–3:00PM)
- Drought Indicators and Metrics Workshop #3 – Thursday, September 3, 2026 (1:00PM–3:00PM)
- DRIP Collaborative Fall Meeting – Friday, October 16, 2026 (10:00 AM – 5:00 PM)

Orit also flagged the [SB552 Drought Resilience Symposium](#), taking place September 24 in Sacramento, as an opportunity to look back at the DRIP Collaborative's accomplishments to date and look ahead to future work.

Orit posed two questions for the members: Given our focus on two priority initiatives this year, how well are our discussions advancing the purpose and goals of the DRIP Collaborative? And, for the October meeting, do you have topics, issues, or emerging opportunities you would like us to discuss or learn more about?

Members emphasized the need to move from planning toward actionable, "shelf-ready" outputs the state can draw on when the next drought hits. Members also raised the importance of a longer-term funding strategy, including using strong budget years to build more durable water infrastructure funding with Prop 4 raised as a current opportunity for members to weigh in on draft guidelines. Members affirmed that narrowing the group's focus to two priority initiatives this year has been valuable for making progress and keeping conversations manageable.

Suggestions for the October meeting included a possible scoping exercise to identify concrete deliverables members' represented communities would benefit from, a conversation on when water quality issues become water supply constraints, and inviting speakers from GSAs, nitrate management zones, or the flood/emergency management space to share lessons applicable to drought preparedness.

Deputy Director Gosselin closed the meeting, noting that despite improved surface water conditions, groundwater basins remain in drought. He underscored that developing actionable items through the DRIP Collaborative is critical to be prepared for questions from the next administration and legislature when the next drought arrives. He thanked members for a thorough and substantive day of discussion, welcomed new members, and encouraged continued participation at the upcoming workshops.

Appendix A. Meeting Participation

Drought Resilience Interagency Partnership & Collaborative Members

Present

- Alex Biering, California Farm Bureau
- Carolina Hernandez, Los Angeles County Public Works
- Charles Delgado, California State Association of Counties
- Emily Rooney, Agricultural Council of California
- Ivy McElroy, Environmental Defense Fund – Alternate for Anna Schiller
- Joaquin Esquivel (member), Karen Mogus (alternate), Andrew Altevogt (alternate), State Water Resources Control Board
- Joshua Cahill, Yurok Tribe
- Katy Landau, California Environmental Protection Agency
- Laura Ramos, California Water Institute at Fresno State
- Maria Gallegos Herrera, Rural Community Assistance Corporation
- Mariko Falke, California Department of Water Resources
- Nate Ortiz, Governor's Office of Emergency Services
- Paul Gosselin (Chair), California Department of Water Resources
- Samantha Arthur, California Natural Resources Agency
- Sierra Ryan, Santa Cruz County
- Sophie Morin, Association of California Water Agencies – Alternate for Chelsea Haines
- Suzanne Pecci, Domestic Well Planning Group South American Subbasin
- Tami McVay, Self Help Enterprises
- Tim Worley, CalMutuals
- Virginia Jameson, California Department of Food and Agriculture

Absent

- Abby Edwards, Governor's Office of Land Use and Climate Innovation
- Alvar Escriva Bou, University of California, Davis
- Brent Hastey, Plumas Self Storage
- Emiko Burchill, California Department of Fish and Wildlife
- Jennifer Clary, Clean Water Action – alternate for Kelsey Hinton of Community Water Center. Attended virtually; does not count towards quorum.
- Redgie Collins, CalTrout