FAQs: A Modern Approach to Drought Early Warning – Southern California Pilot

What is the name of this pilot product?

Sector-Specific Drought Early Warning Outlook - Southern California Pilot.

What's our vision and mission?

Our vision is improved drought resilience for our Nation's economic sectors. Our mission is to inform early warning decision-making with co-developed, sector-specific, and evidence-based drought intelligence.

Who are we?

NOAA's National Integrated Drought Information System (NIDIS) and Physical Sciences Laboratory are partnering with the California State Climatologist/California Department of Water Resources, NOAA's National Weather Service (NWS) and National Centers for Environmental Information (NCEI), and the California-Nevada Adaptation Program, a NOAA CAP team.

Who has been invited to participate?

Decision-makers and information providers from the agricultural, water utility, and public health communities in or related to Southern California. Southern California includes Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, and Ventura counties.

What evidence is the outlook based on?

Integrated information products, services, and experimental applications that include observations, forecasts, and deep knowledge of local-to-regional-scale drought behavior.

How is confidence determined?

A confidence level for each drought outlook scenario is provided based on guidance from the <u>IPCC AR5</u>. Low confidence indicates low agreement among several sources of evidence. Medium confidence indicates moderate agreement among several robust sources of evidence. High confidence indicates high agreement among several robust sources of evidence.

What is an early warning system?

"An integrated system of hazard monitoring, forecasting and prediction, disaster risk assessment, communication and preparedness activities systems that enables individuals, communities, governments, etc. to take timely action to reduce disaster risks in advance of hazardous events." - Adapted from Early Warnings for All Executive Action Plan

Our integrated approach involves users and focuses on co-developed, evidence-based, and sector-specific scenarios. This approach identifies drought risks with users, creates future drought scenarios based on the best available evidence, and shares and revises understandable and actionable drought scenarios. This supports the development of future drought response strategies to inform future drought assessment, analysis, and communication.



How early is early warning?

Predictability is situationally dependent. At times, we are able to predict an outcome with confidence while others are more limited. The early warning framework we're piloting provides value as regular monitoring and prediction activities will provide the latest information to decision-makers and users.

At the collaborative session and through one-on-one conversations, we are listening to your unique needs and balancing being responsive to your temporal and spatial needs and the state of the science. The process outlined below will provide you with tailored, evidence-based outlook information and offer opportunities to evaluate and incorporate new monitoring and forecast information in a user-centric approach.

How and when will the outlooks be issued? How can we work with you?

We propose to deliver drought early warning information and sector-specific drought scenarios monthly from October 2024–May 2025 via a virtual outlook presentation and companion document on drought.gov.

The decision support cycle (see figure below) will start with a solicitation via email of users'/sectors' (YOU!) concerns and considerations for the upcoming forecast periods. We will prepare the Sector-Specific Drought Early Warning Outlook, combining this information with the best available evidence-based drought intelligence. The Outlook will include a state of the global climate, regional drought, and sector-specific drought scenarios that provide users with forward-looking outlooks of the most likely drought outcomes relevant to their decisions. Drought scenarios are based on integrated information products, services, and experimental applications that include observations, forecasts, and deep knowledge of local-to-regional-scale drought behavior.

Participation in this pilot means you will receive this information monthly via an interactive meeting and an email. We are excited to provide this information, as well as learn from you all in this user-centric approach. We've designed this two-way communication to support discovery of the feasibility, opportunities, and barriers to deliver targeted drought early warning information, improve the process in real time, and determine scalability to other regions.

