“Springboarding” off the California-Nevada Drought Early Warning System Strategic Plan

CA-NV DEWS Partner Meeting
Amanda Sheffield | November 18-19, 2019
A Drought Early Warning System (DEWS) utilizes new and existing networks of federal, tribal, state, local and academic partners to make climate and drought science accessible and useful for decision makers.
Drought Early Warning

“A system that collects and integrates information on the key indicators of drought in order to make usable, reliable, and timely drought forecasts and assessments of drought.....

...and communicates drought forecasts, conditions, and impacts on an ongoing basis to decision makers, the private sector, and the public.”

NIDIS Public Law 109-430
Kicked off in 2010-2012 in California with regional meetings and pilots and a 2014 California Drought Forum meeting.

Following the Nevada Drought Forum, Nevada was integrated in 2016.

CA-NV DEWS first Strategic Plan released in 2017 with a partner meeting in June 2017 in Reno, NV.
First CA-NV DEWS Strategic Plan 2017-2018

Priority 1 – Optimize the Collaborative DEWS Network

Priority 2 – Develop Drought Monitoring and Research

Priority 3 – Develop Forecast and Decision Support Tools for Resource Managers

Priority 4 – Improve Drought Early Warning Communication and Outreach

First CA-NV DEWS Strategic Plan 2017-2018

- Quarterly Partner Calls
- Place Based Decision Making & Cloud Computing & Trainings
- Integrate Drought & Climate Science into Wildfire Management & Develop a Wildfire Component for the CA-NV DEWS
- Evaporative Demand forecasts
- NOAA Drought Amelioration Tool & CPC Drought Outlooks
- CA-NV Drought & Climate Outlook Webinar Series & In Person Meetings
- Communication of water supply status and snow
- Regional project such as groundwater monitoring modeling with USGS in the Central Valley, Russian River valley drought risk & best practices on landscape, water resource management in southern Nevada

Example activities that are continuing:

- Matrix of Drought Related Activities and Resources
- Strengthen the USDM process
- Support Drought Planning
- Communication Framework

June 2017 CA-NV DEWS Partner Meeting

**Gaps/Need**

**Drought Monitoring opportunities:**
- Create opportunities for integration and assessment of monitoring across agencies and sectors as pertains to drought.
- Support a collaborative monitoring organization.
- Facilitate one stop shop for info and standardizing/integrating data sets.
- Facilitate the correlation between measured drought parameters and regional/sector specific impacts.
- Standardize and motivate regional impact reporting.

**Forecasting opportunities:**
- Coordination of stakeholder forecasting tools needs and comprehension.
- Develop accessible skill assessments of seasonal forecasts, including of streams, groundwater, ET, soil moisture.
- Hydrological forecasting products for variables such as snow and soil moisture.
- Examine applications of historical performance of forecasts to drought scenario planning.
- Advocacy for more parameter availability for expanded forecast analysis.
Communication & capacity building opportunities:
• Communicate best available tools and how can be used for informed decision making.
• Develop sector based communication approaches, including engaging sector leaders so they can communicate sector impacts.
• Create communication networks that move from the drought upwards.
• Facilitate communication and integration of risk and uncertainty information for better decision making.
• Facilitate understanding of how drought information (such as U.S. Drought Monitor) feeds into state and local decision making.
• Facilitate “common ground” between information development and consumer.
• Develop dedicated trainings and education for agency staff on best practices for how to use existing tools, as well as new.
• Local annotation of the USDM.
Gaps/Need

June 2017 CA-NV DEWS Partner Meeting

• Timely sharing of ongoing research and innovations
• Identifying redundancy of tools and information
• Regional database of research and stakeholders
• Connecting local and national efforts
• Better connecting observations with social impacts
• Explore planning and preparedness activities and post drought assessments
• New Partners: public health, NGOs, private sector, tribes, and economists.
CA-NV Drought Early Warning System

2020-2022 Regional Implementation Plan

Where do we want the CA-NV DEWS to be in 3-4 years?

What role does the CA-NV DEWS serve?

What should it do? What shouldn’t it do?
What activities should the CA-NV DEWS undertake over the next 3-4 years?

What key issues/gaps/opportunities should the CA-NV DEWS address?

What can we do better together than separately?
National Integrated Drought Information System
Drought.gov

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https://www.drought.gov/drought/dews/california-nevada