

The National Integrated Drought Information System (NIDIS)

Advancing Drought Science and Preparedness across the Nation

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What is the National Integrated Drought Information System (NIDIS)?

- Authorized by Congress in 2006 and re-authorized 2014 and 2018.
- Interagency mandate to develop and provide a national drought early warning information system.

“Enable the Nation to move from a reactive to a more proactive approach to managing drought risks and impacts.”



FEMA

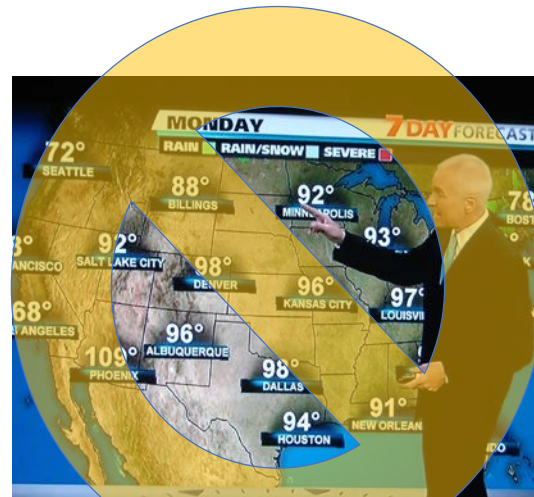


What is a Drought Early Warning System?

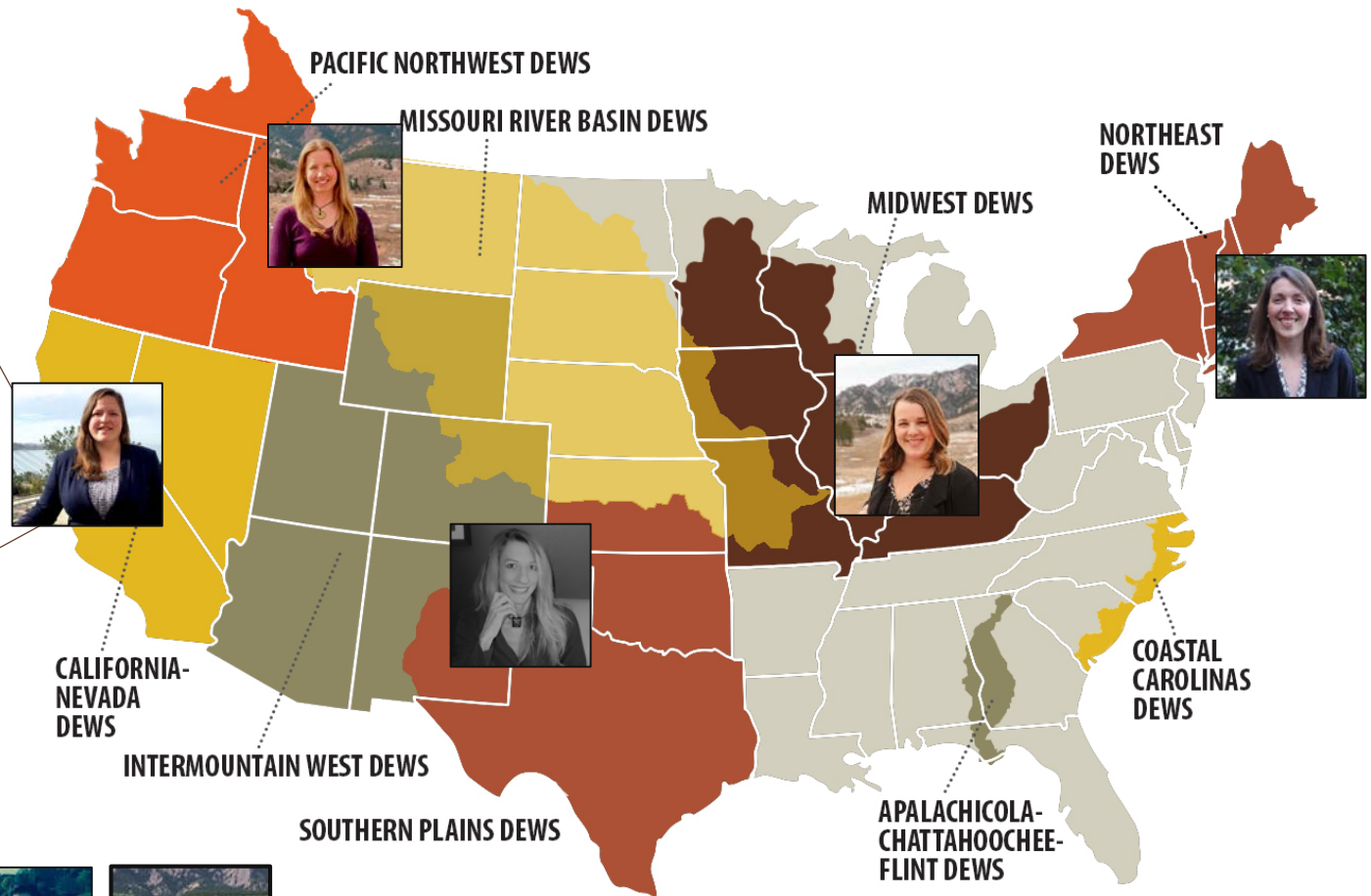
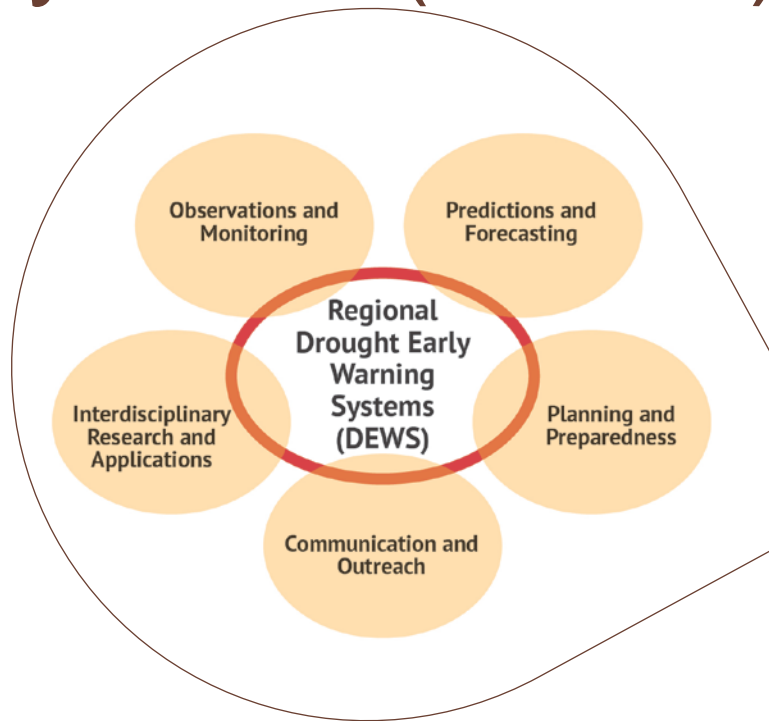
“A comprehensive system that collects and integrates information on the key indicators of drought in order to make usable, reliable, and timely drought forecasts and assessments of drought.....

...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



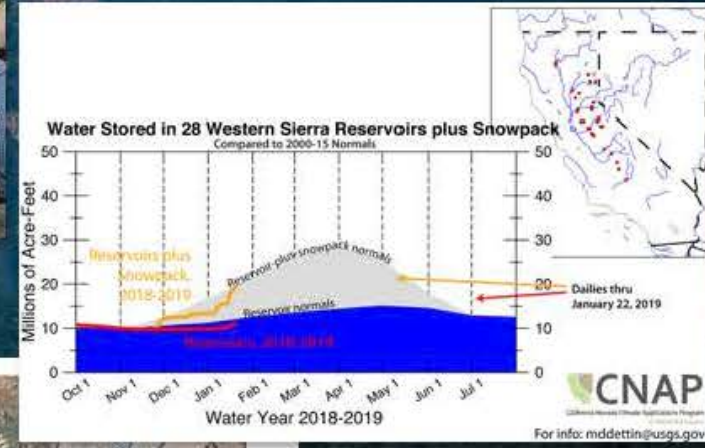
NIDIS Regional Drought Early Warning Systems (DEWS)





THE CALIFORNIA-NEVADA DROUGHT EARLY WARNING SYSTEM

The CA-NV DEWS utilizes new and existing partner networks to optimize the expertise of partners in order to make climate and drought science readily available, easily understandable and usable for decision makers; and to improve the capacity of stakeholders to better monitor, forecast, plan for and cope with the impacts of drought.



- Optimize the collaborative DEWS network
- Development of Drought Monitoring Metrics & Research
- Develop Forecast & Decision Support Tools for Resource Managers
- Improve Drought Early Warning Communication & Outreach



CALIFORNIA-NEVADA DROUGHT OUTLOOK NOVEMBER 2018

National Integrated Drought Information System

General Drought Outlook

The 2018 Water Year was off to a dry start in California. According to the U.S. Drought Monitor, 75% of California remains in moderate (D2) to extreme drought (D3) as of Nov. 8 (Fig. 1). Extreme drought (D3) conditions began expanding south to Santa Barbara counties while (D2) conditions expanded over the Inyo and northern coastal portions. Precipitation at the end of November was only December's improved state of these conditions.

Regional Strength in Climate Update

California and Nevada started the 2018 water year (Oct. 1, 2018) with precipitation totals below normal. For example, on November 15, most of California had ~75% percent of normal precipitation. High heat and low conditions combined with short-term moisture resulted in several drought fires in California in November.

Three atmospheric river (AR) events starting around Thanksgiving and continuing through the end of November brought rain and snow to California Nevada, with the largest event reaching into southern California. As of the end of November, 8 of 26 basins of the region received more of their normal November CA-NV southern basins, while others are above normal (total CA-NV and southern CA). On 8 the temperature was above normal over much of the region, with some regions as high as 4°F above normal (Fig. 2).

Development of the Santa Ana and the Red Flag (Fig. 4). Major California reservoirs are still in deficit. Most of averages, while 1.66. Future scenarios show the national fire.

Fig. 1. National integrated drought outlook for November 2018.

Fig. 2. Regional strength in climate update for November 2018.

Fig. 3. National integrated drought outlook for November 2018.

Fig. 4. Regional strength in climate update for November 2018.

Red Flag Warning
Wednesday November 7 - Friday November 9, 2018

Impacts

- Easier fire starts
- Potential for rapid spread of fire

Timing

- Tonight - Friday morning

Winds & RH

- North to east winds 20-30 mph, gusts 30-55 mph
- Minimum daytime humidity 5-15%
- Poor overnight humidity recovery



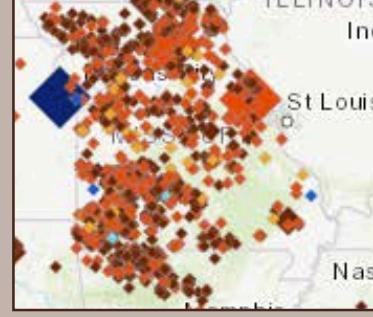
Strategize Effective Ways to Approach Complex Topics



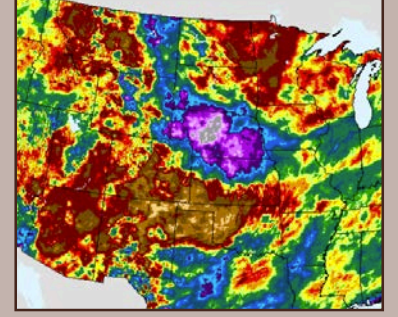
Drought & Public Health



Drought & Wildfire



Drought Impact Reporting & Analysis

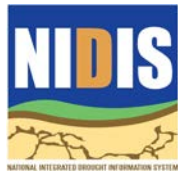


Drought Indicators & Triggers

Drought & Public Health Linkages: Improving Drought Early Warning

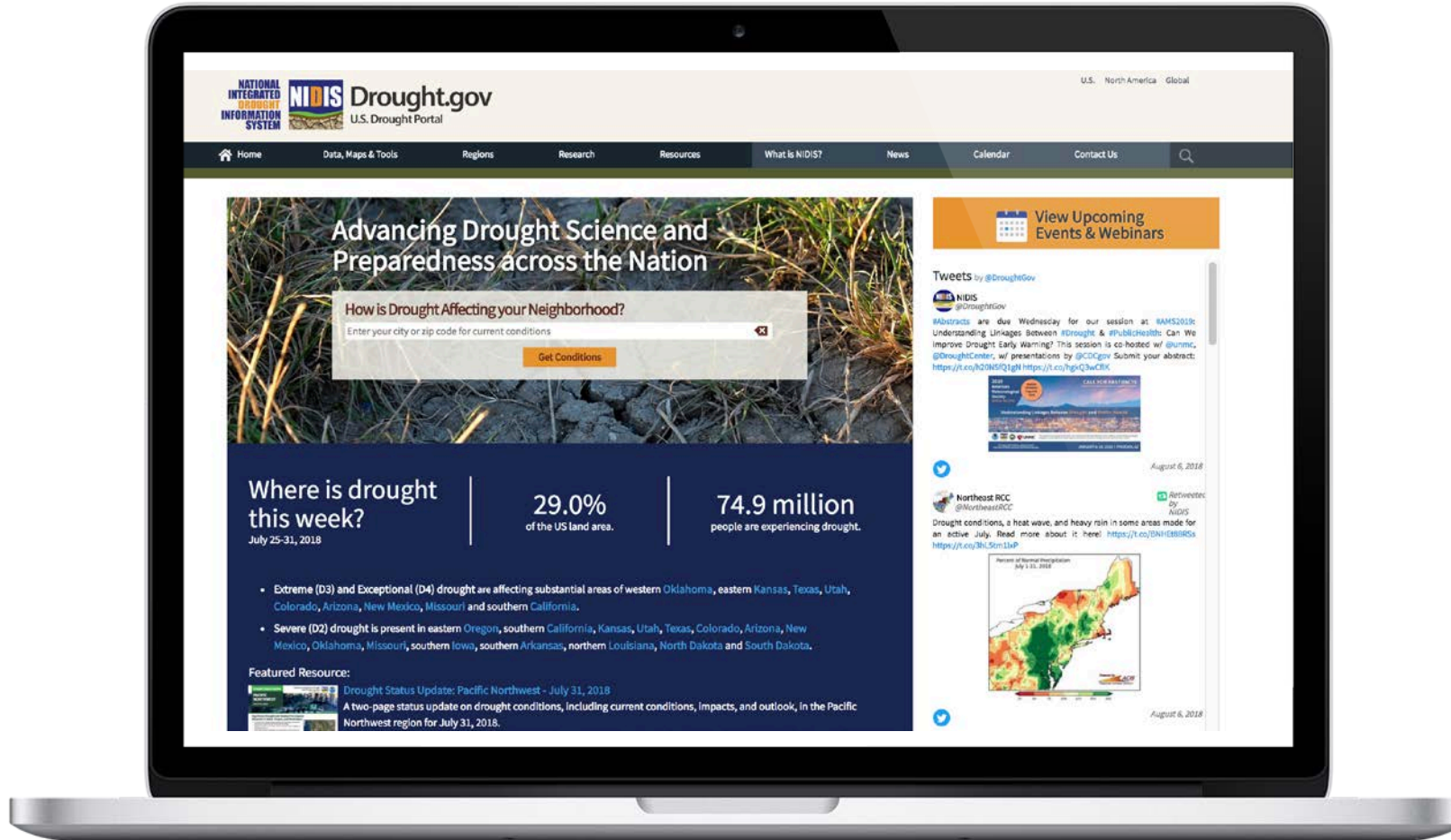
2018-2020 Activities:

- Form a National Drought & Public Health Working Group
- Create a public health sector space on the U.S. drought portal
- Pilot Workshop for a State/Regl Dept of Public Health
- Support research & communication of linkages btwn physical mechanisms of U.S. drought & public health impacts
- 2019 Public Health Summit & Regional Workshops
- **Drought & Public Strategy: multiyear, joint, collaborative, multi agency strategy of a set of coordinated activities**

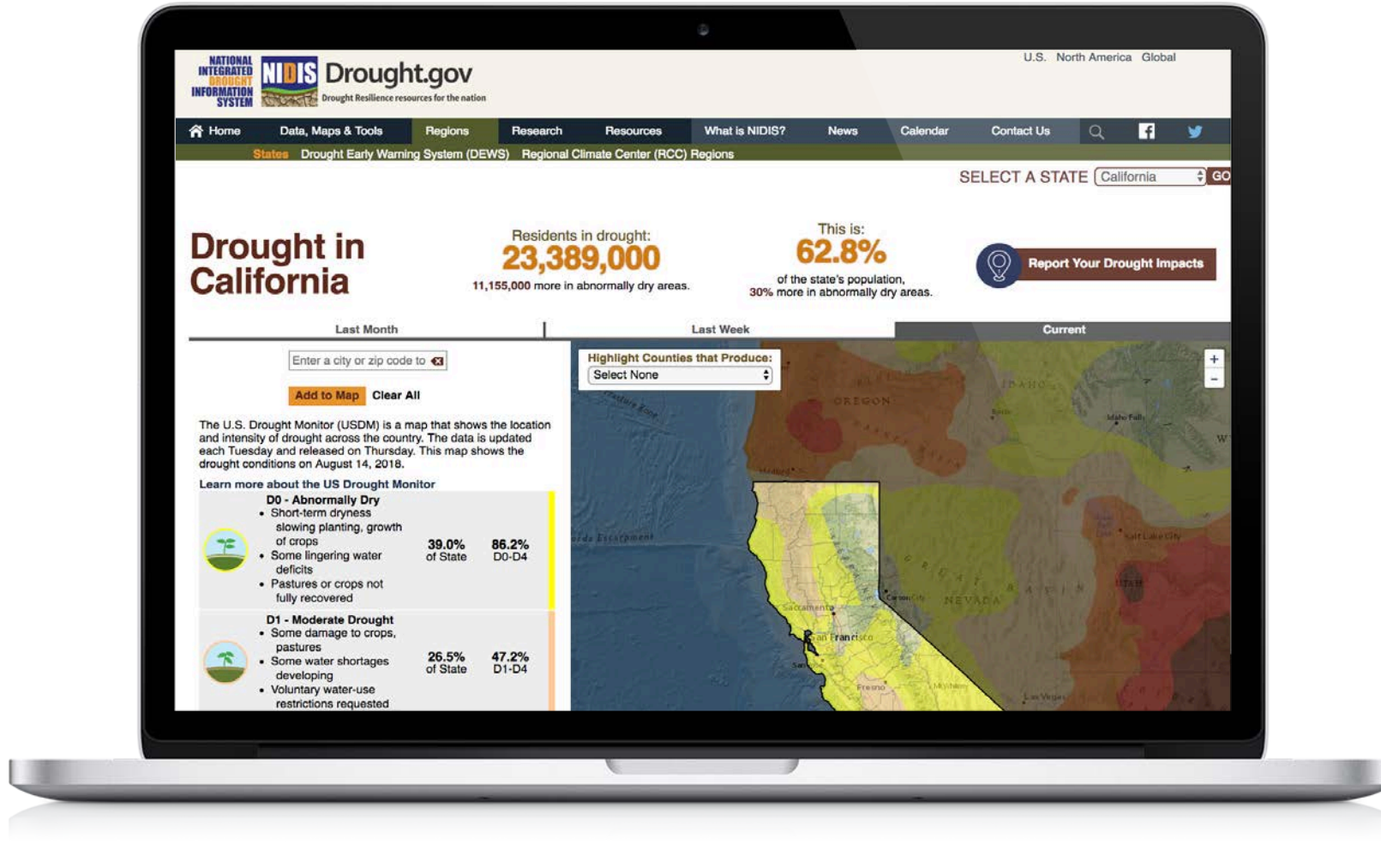


+Growing List of Partners

Drought.gov



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