THE NATIONAL INTEGRATED DROUGHT INFORMATION SYSTEM (NIDIS)

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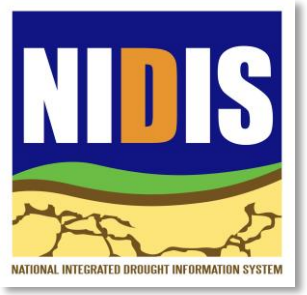
WSWC WIMS WORKSHOP
PASADENA, CA



Outline

What is NIDIS?

Integrating Partner & Stakeholder Feedback

NIDIS Supporting Data

Drought.gov

What is NIDIS?

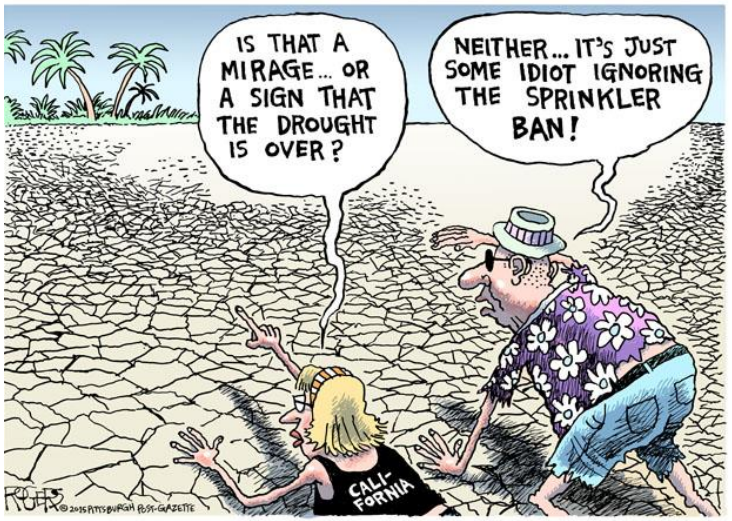
NIDIS was authorized by Congress in 2006 with an interagency mandate to develop and provide a national drought early warning information system.

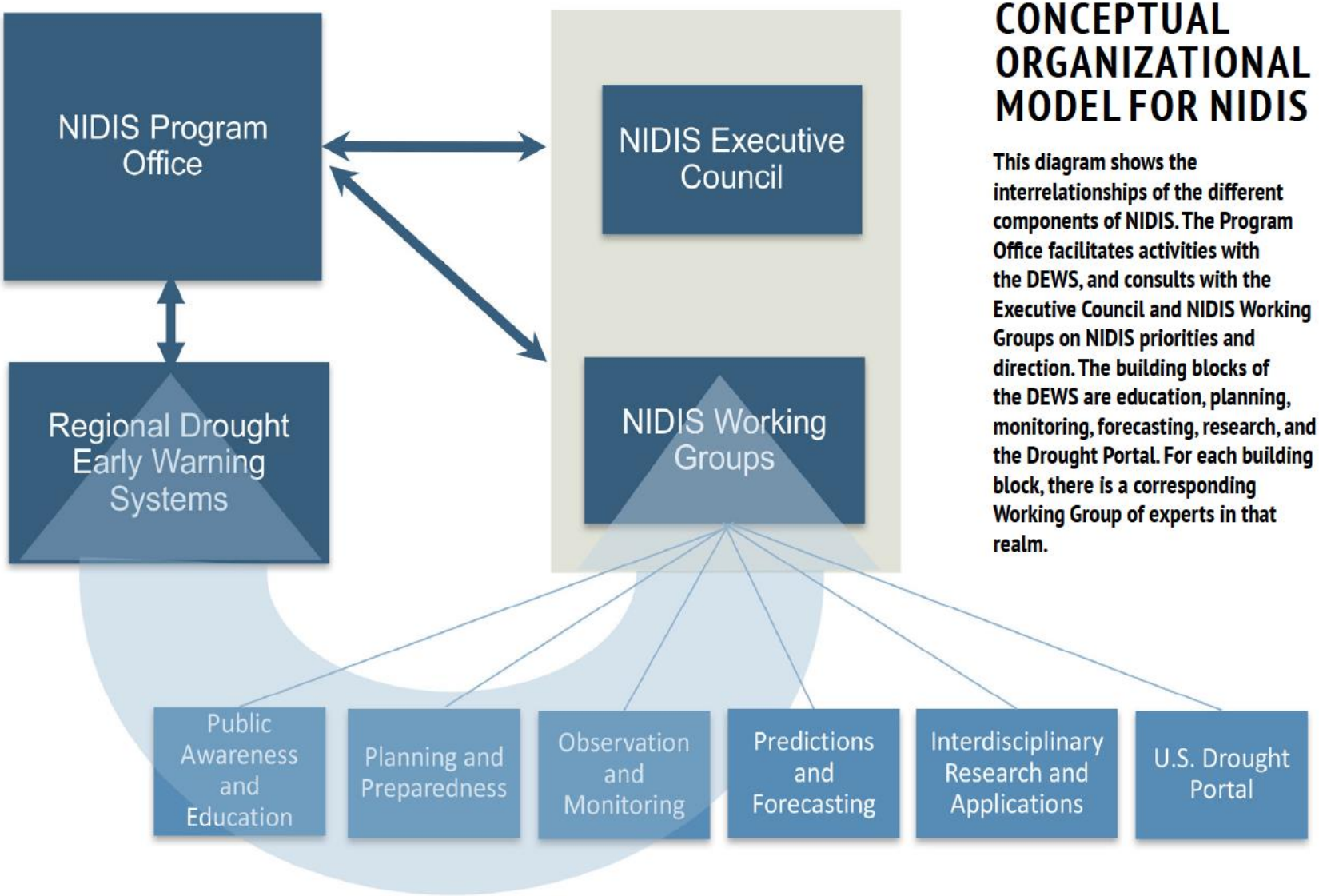
NIDIS Goals

- Foster leadership and networking among all sectors of the economy and services to monitor, forecast, plan for and cope with the impacts of drought

- Support drought research, including indicators, risk assessment and resilience, as well as assessment of past events

- Develop educational resources, interactive systems, and tools to promote sound decision making, drought awareness, and response





CONCEPTUAL ORGANIZATIONAL MODEL FOR NIDIS

This diagram shows the interrelationships of the different components of NIDIS. The Program Office facilitates activities with the DEWS, and consults with the Executive Council and NIDIS Working Groups on NIDIS priorities and direction. The building blocks of the DEWS are education, planning, monitoring, forecasting, research, and the Drought Portal. For each building block, there is a corresponding Working Group of experts in that realm.

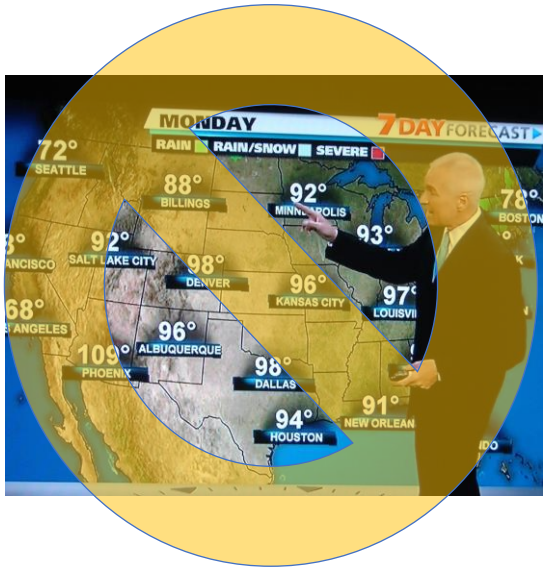
https://www.drought.gov/drought/nidis-implementation-plan-2016-update

What is a Drought Early Warning System?

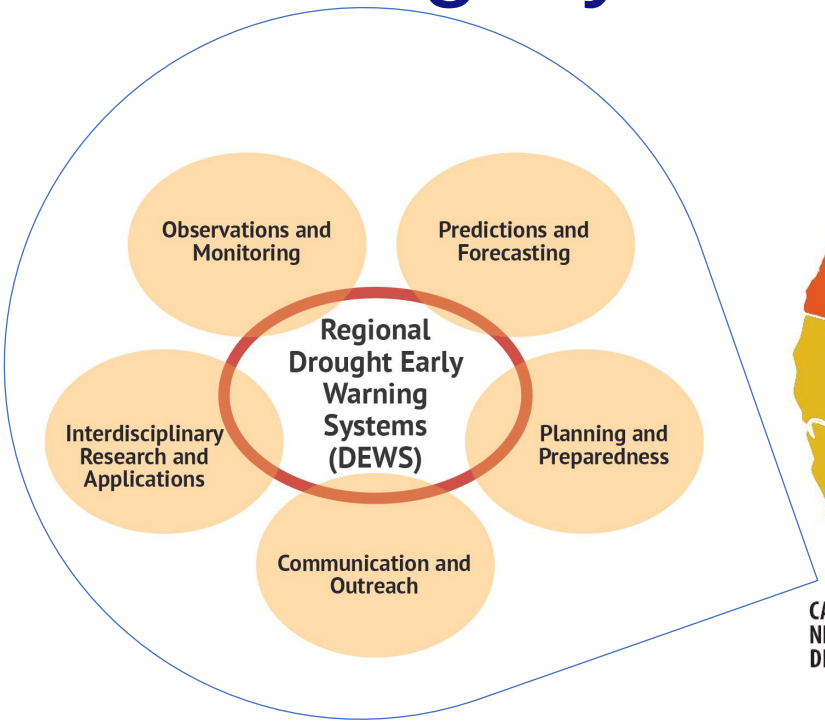
"A comprehensive system that collects and integrates information on the key indicators of drought in order to make usable, reliable, and timely drought forecasts and assessments of drought…..

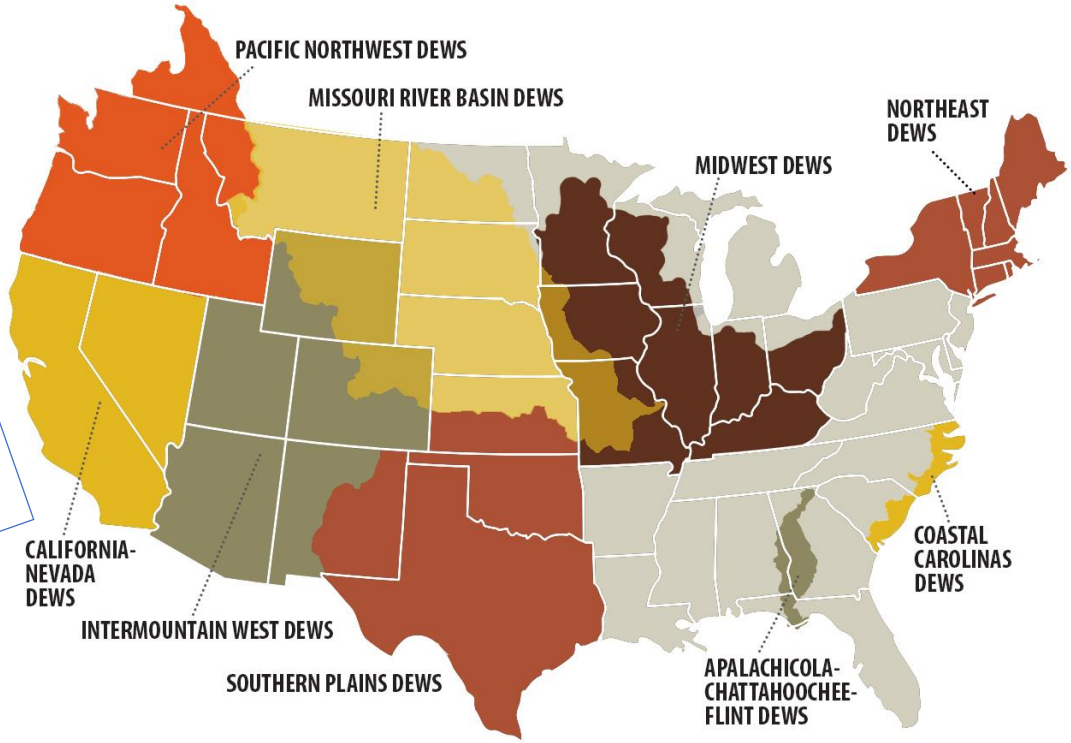
…and communicates drought forecasts, conditions, and impacts on an ongoing basis to decision makers, the private sector, and the public."

- NIDIS Public Law 109-430

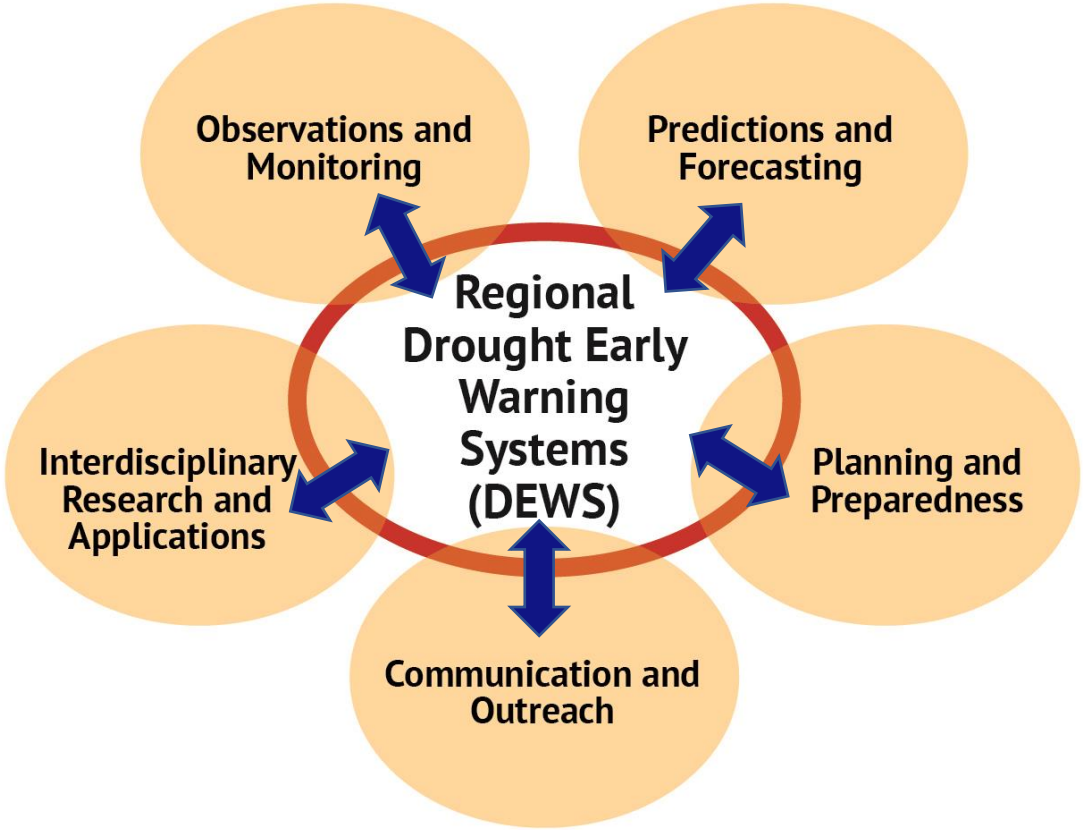


NIDIS Regional Drought Early Warning Systems (DEWS)





Integrating Partner & Stakeholder Feedback



- Robust, engaged DEWS partner network
- Leveraging of resources, programs, and partnerships
- Identifying gaps and needs
- Facilitate opportunities for information sharing and feedback
- Collaborate in co-production

THE CALIFORNIA-NEVADA DROUGHT EARLY WARNING SYSTEM

- Strategic plan provides a **roadmap** for moving forward the CA-NV DEWS
  - Identify existing and new drought- related activities throughout the region
  - “Living document” w/ 2-yr time frame

- Current priorities include:
  - *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*

NOAA National Oceanic and Atmospheric Administration U.S. Department of Commerce

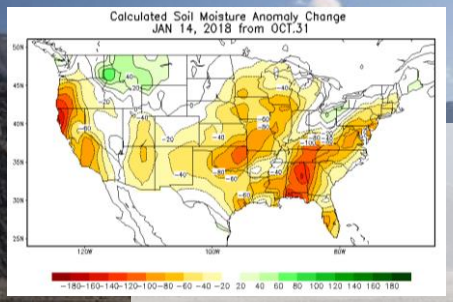
NIDIS National Integrated Drought Information System

CNAP California-Nevada Climate Applications Program

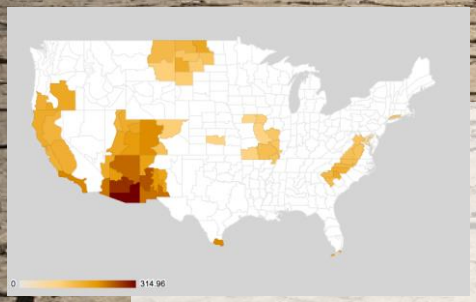
Western Regional Climate Center
Providing climate services since 1986

DRI Desert Research Institute

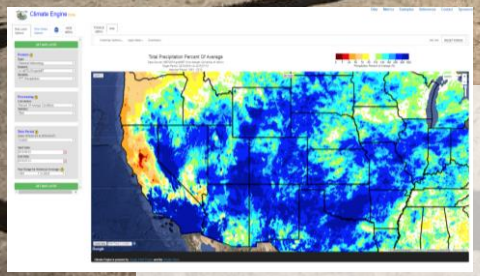
NIDIS Supporting Data



Building a Coordinated National Soil Moisture Network

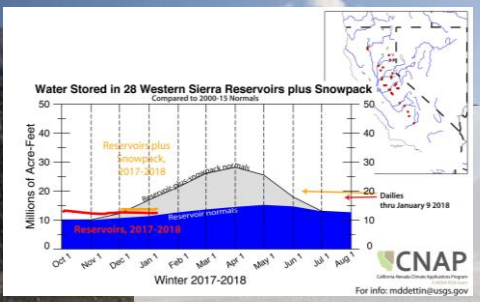


Drought Amelioration

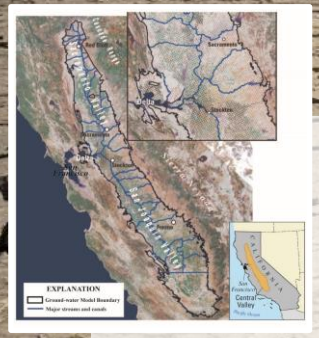


Climate Engine

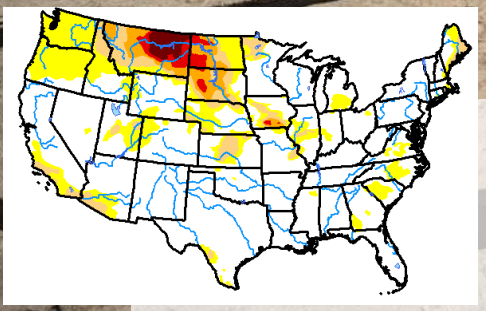
NIDIS Supporting Data



Precipitation & Water Storage Tracking



Statistical Estimates of Central Valley Groundwater Pumping



Northern Plains Post-Drought Assessment

What is the U.S. Drought Portal?

The U.S. Drought Portal (**drought.gov**) was launched in 2008 as an information clearinghouse for authoritative and easily accessible drought monitoring products, per the mandate of the NIDIS Public Law.

- Research & Monitoring
- Communication & Outreach
- Regional Information Networks

NEXT STEPS

01 INITIAL UPDATES

- Incorporate feedback from 2016 Usability Study
- Sec 508 Compliance
- General site maintenance

02 USER RESEARCH

- Determine site users' needs
- Analyze existing content with users in mind
- Map user experience

03 DESIGN & PRODUCTION

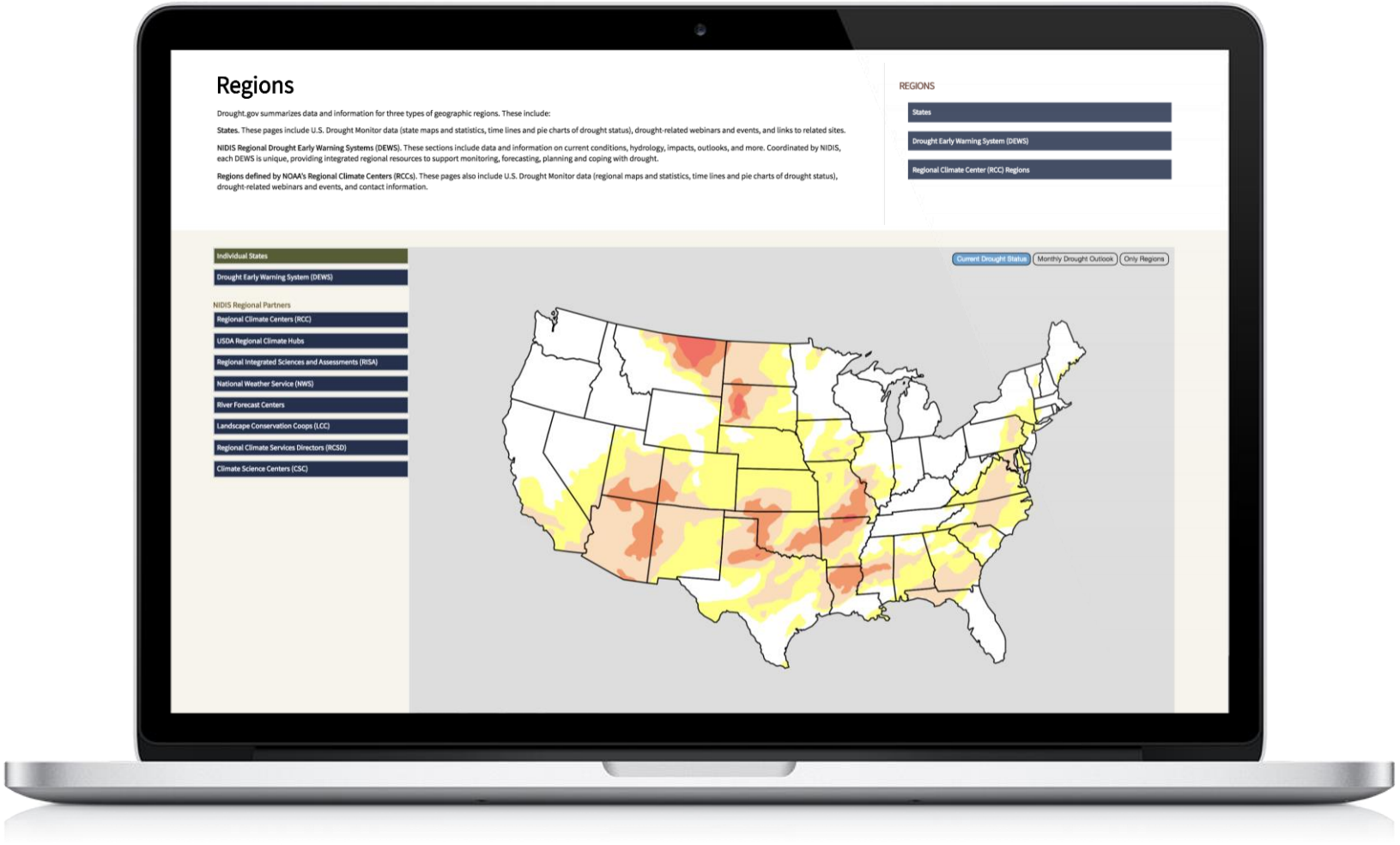
- Build new site using U.S. Web Design Standards
- Migrate to Drupal 8
- Prototyping
- User testing

04 LAUNCH NEW SITE

- Launch
- Continue user testing/development of new tools
- Continue to refine content

“Drought in my Neighborhood”

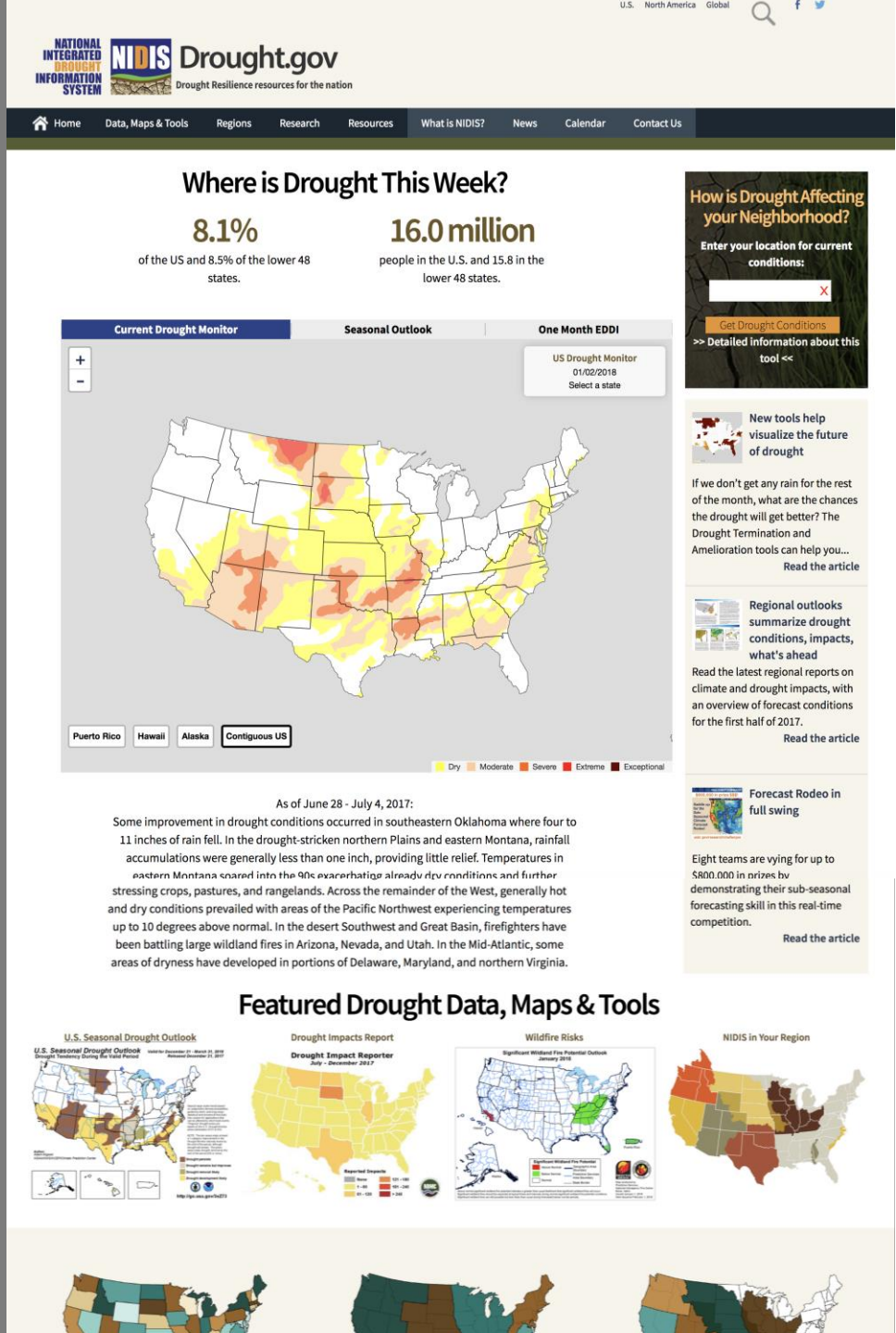
Regions Map


Regions
Drought.gov summarizes data and information for three types of geographic regions. These include:
States. These pages include U.S. Drought Monitor data (state maps and statistics, time lines and pie charts of drought status), drought-related webinars and events, and links to related sites.
NIDIS Regional Drought Early Warning Systems (DEWS). These sections include data and information on current conditions, hydrology, impacts, outlooks, and more. Coordinated by NIDIS, each DEWS is unique, providing integrated regional resources to support monitoring, forecasting, planning and coping with drought.
Regions defined by NOAA's Regional Climate Centers (RCCs). These pages also include U.S. Drought Monitor data (regional maps and statistics, time lines and pie charts of drought status), drought-related webinars and events, and contact information.
REGIONS
States
Drought Early Warning System (DEWS)
Regional Climate Center (RCC) Regions
Individual States
Drought Early Warning System (DEWS)
NIDIS Regional Partners
Regional Climate Centers (RCC)
USDA Regional Climate Hubs
Regional Integrated Sciences and Assessments (RISA)
National Weather Service (NWS)
River Forecast Centers
Landscape Conservation Coops (LCC)
Regional Climate Services Directors (RCSD)
Climate Science Centers (CSC)
Current Drought Status
Monthly Drought Outlook
Only Regions

3 | Current User Testing

Homepage including interactive map

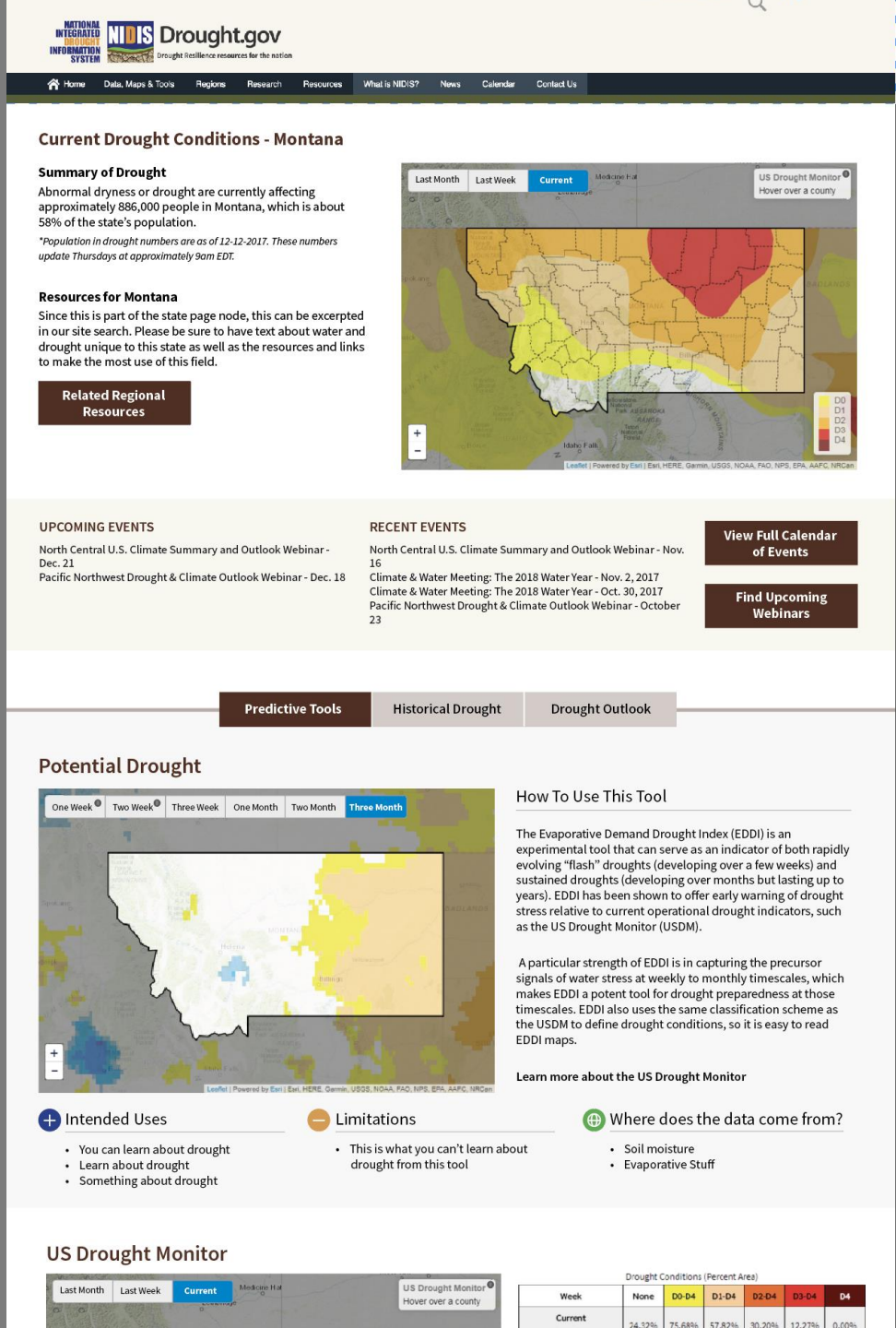
Weekly national updates, multiple map layers and data tools that tell the story about past, present, potential and future drought on both a national and local level.



3 | Current User Testing

State Pages

A snapshot of current drought in the selected state as well as a curated list of predictive, historical and outlook drought tools.



Goals & Opportunities

GOAL 01

Provide Extensive Information

Present accessible, in-depth content on past, present, potential and future drought

GOAL 02

Streamline Navigation

Develop intuitive and simple pathways through the site

GOAL 03

Add Tool Context

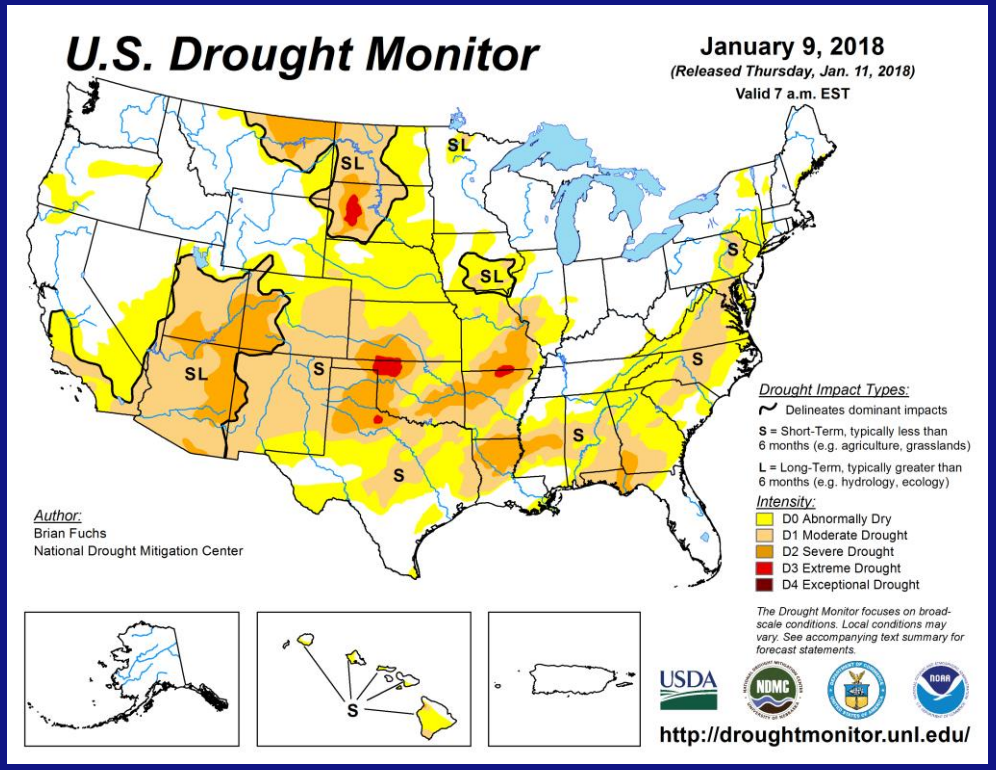
Assist users in finding and utilizing complex data, maps and tools

GOAL 04

Create Communication Network

Engage an active user community in drought early warning

THANK YOU!



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National Integrated Drought Information System

(NIDIS) - NOAA Service Account