



# The Role of NIDIS in Drought and Health



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National Integrated Drought Information System (NIDIS)

Midwest Drought and Human Health Workshop  
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# Overview

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- What is NIDIS?
- What is a Drought Early Warning System (DEWS)?
- NIDIS's interest and involvement in health





## What is NIDIS?

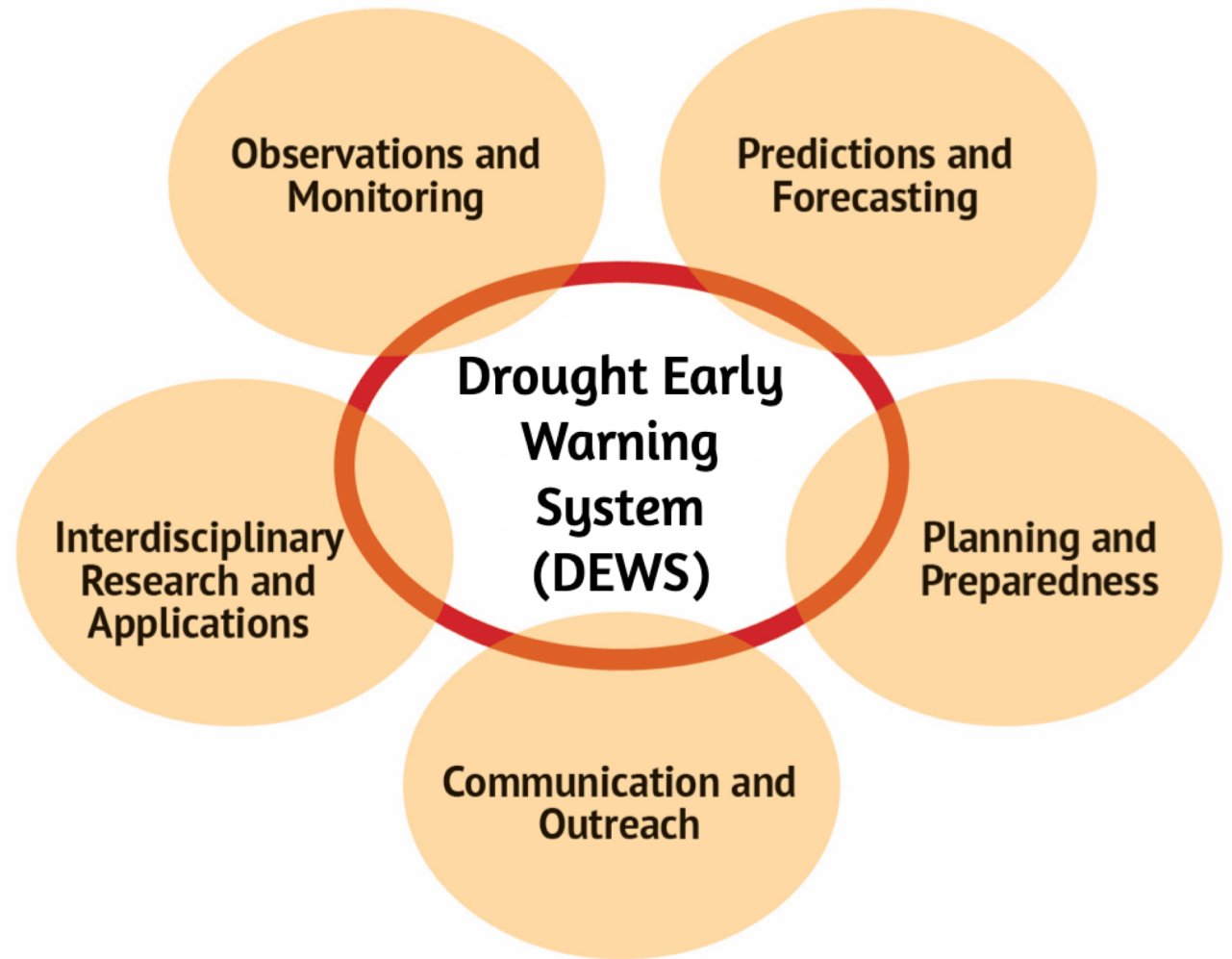
- First authorized by Congress in 2006, and reauthorized in 2014 and 2018.
- Interagency mandate to develop and provide a **national drought early warning information system**.
- Enable the Nation to move **from a reactive to a more proactive** approach to managing drought risks and impacts.
- Authorizes NIDIS to engage in partnerships with federal, state, tribal, and local partners, as well as the private sector, academic institutions, and citizen scientists

APPROACH

# Drought Early Warning

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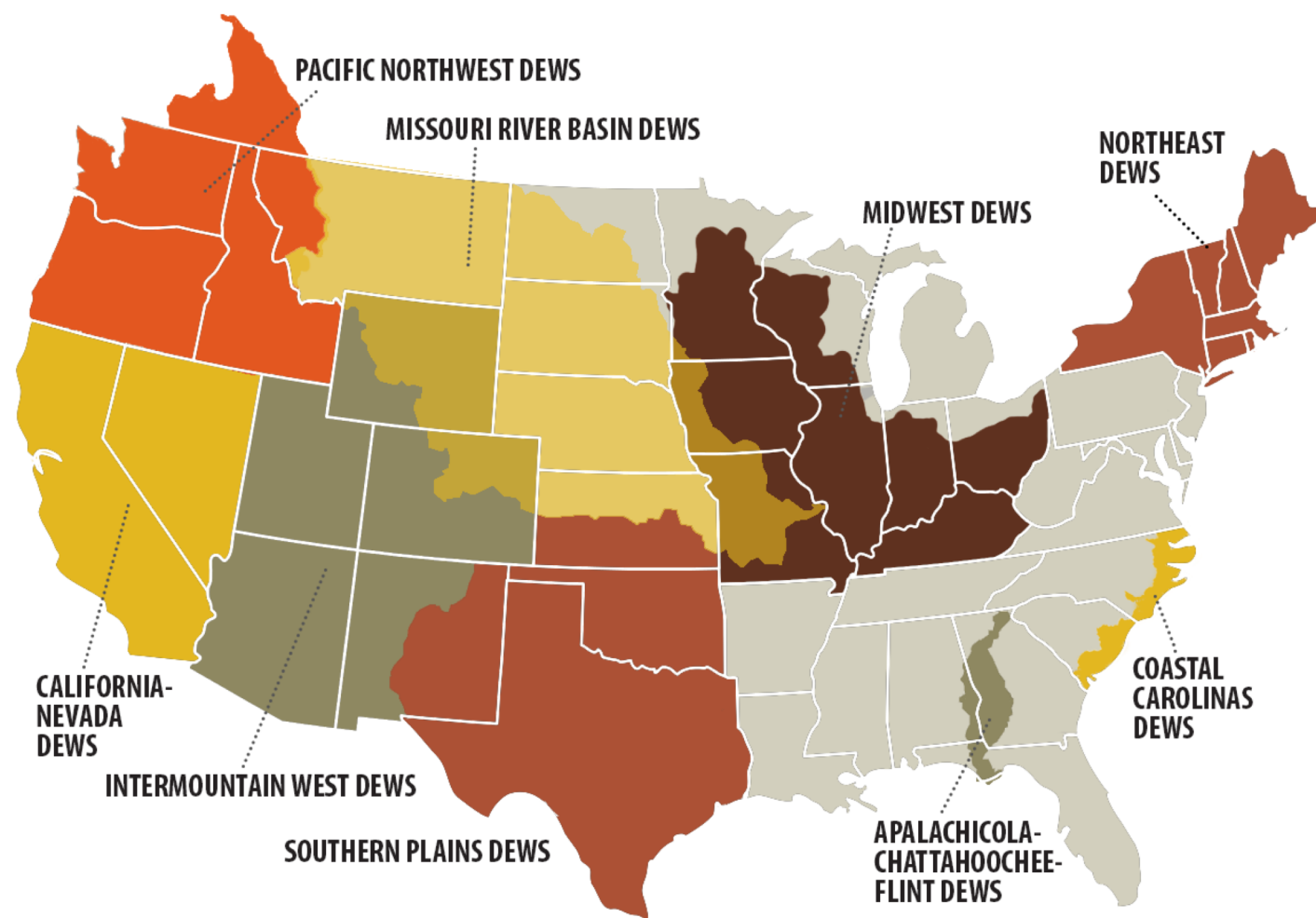
“Provision of timely and effective information, through identified institutions, that allows individuals exposed to a hazard to take action to avoid or reduce their risk and prepare for effective response.”



## REGIONS

# Drought Early Warning Systems

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.

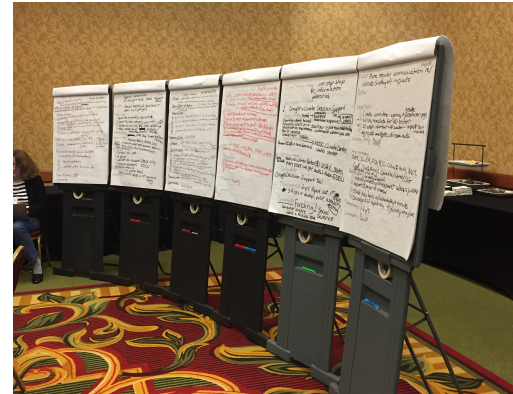
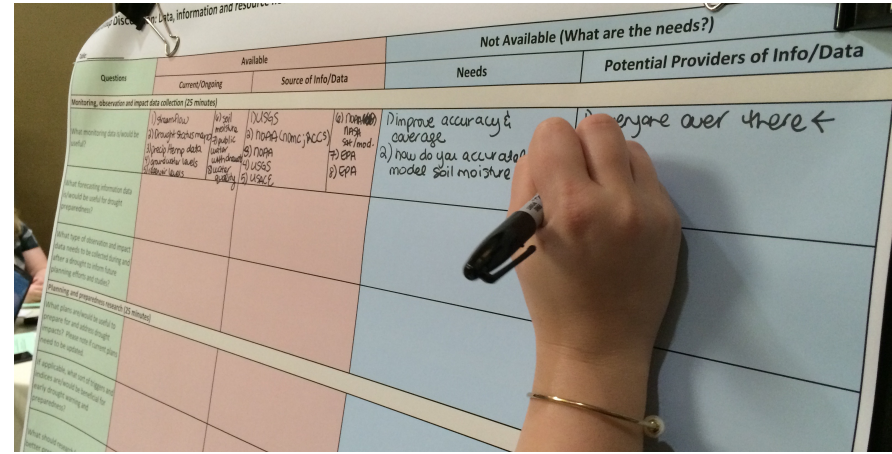


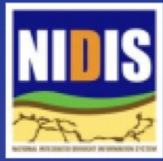
# History of the Midwest DEWS

## Meetings

- Launch: Feb 2016 (St. Louis, MO)
- Four regional workshops in Nov-Dec 2016
- Communications workshop in May 2018

Discussion of the current state of drought awareness, planning and capacity across the region to identify several gaps and needs.





## MIDWEST DROUGHT EARLY WARNING SYSTEM (DEWS)

2018-2019 Strategic Plan

# Midwest DEWS Strategic Plan 2018-2019

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## Priorities

Integrate impacts, data, management practices and research into drought planning.

Enhance drought observations and data availability.

Improve drought early warning and communication capacity.

Foster stakeholder collaboration, coordination and relationship building.

# Drought & Human Health Linkages

## 2018-2020 Activities:

- Formed a national Drought and Public Health Working Group
- Held National Public Health Summit (June 2019)
- Host a series of regional drought and HH workshops
- Support research and communication of linkages
- Create a public health sector page on Drought.gov
- **2020 NIDIS Drought & Public Health Strategy**



*+Growing List of Partners*





June 17-19, 2019 | Atlanta, GA

# National Drought & Public Health Summit

- Discuss ways to better prepare our public health agencies and organizations for the health hazards associated with drought
- 54 attendees from local, state, federal, tribal, non-profit, and academic partners
- Example Key Priority Actions:
  - Technical meeting on public health and drought indicators
  - Research needs, e.g., human health costs of drought; mental health impacts of drought
  - Communication materials
  - Integration of the public health sector into the regional DEWS

<https://www.drought.gov/drought/calendar/events/national-drought-public-health-summit>

# NIDIS & Fire Community Release Drought & Wildland Fire Nexus Strategic Plan: 2018-2022

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## THE NATIONAL INTEGRATED DROUGHT INFORMATION SYSTEM DROUGHT AND WILDLAND FIRE NEXUS (NDAWN) STRATEGIC PLAN: 2018-2022

*Improving the utilization  
of drought information in  
wildland fire management  
for ecological health, public  
health, and firefighter safety.*

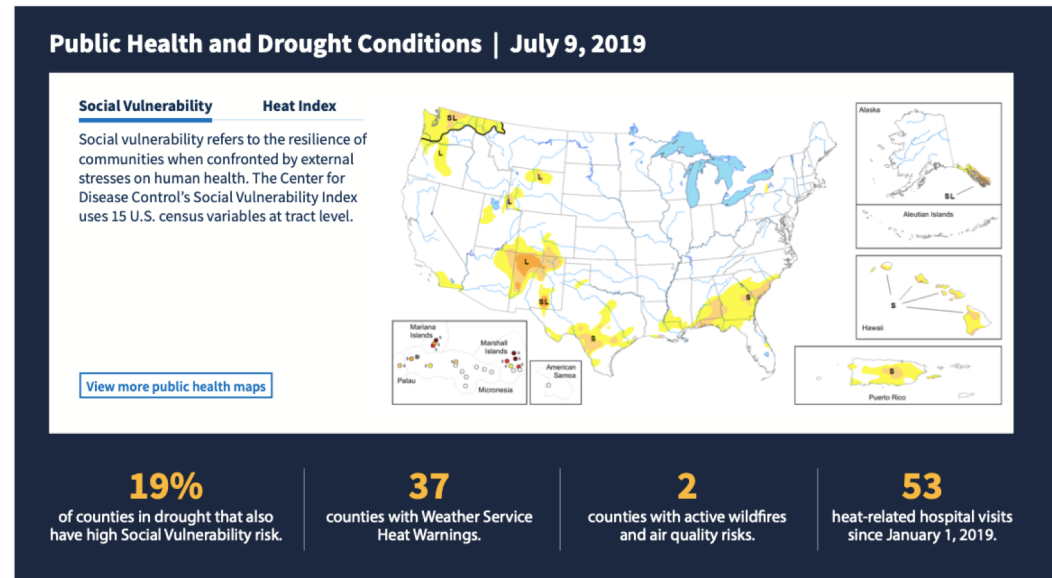
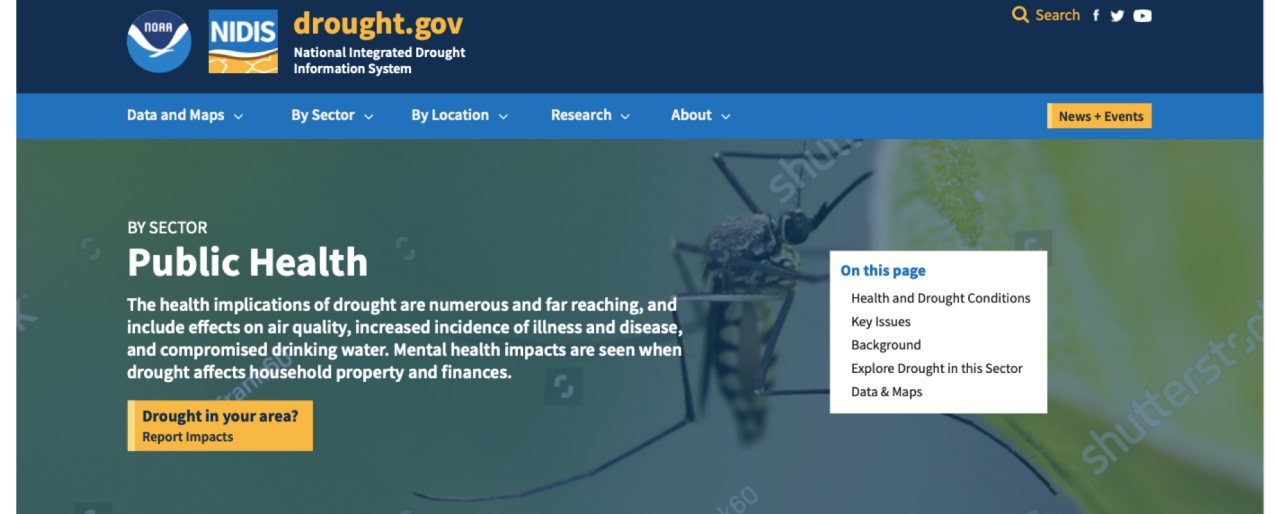
SEPTEMBER 2018



To improve the utilization of drought information in wildland fire management for ecological health, public health, and firefighter safety.

# U.S. Drought Portal (Drought.gov) Redesign

- Improved site navigation
- Sector specific information
- Localized information
- Highlight drought research



**Key Issues**

**Air Quality**  
During drought, there is an increased risk for wildfires and dust storms. Particulate matter from these events can irritate the bronchial passages and lungs.

**Mental Health Impacts**  
Complex relationships between drought and its associated economic consequences can increase mood disorders, domestic violence, and suicide.

**Increased Incidence of Illness and Disease**  
Drier conditions can increase reproduction of a fungus found in soils, potentially leading to the disease coccidioidomycosis, or Valley fever.

# Thank You!

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