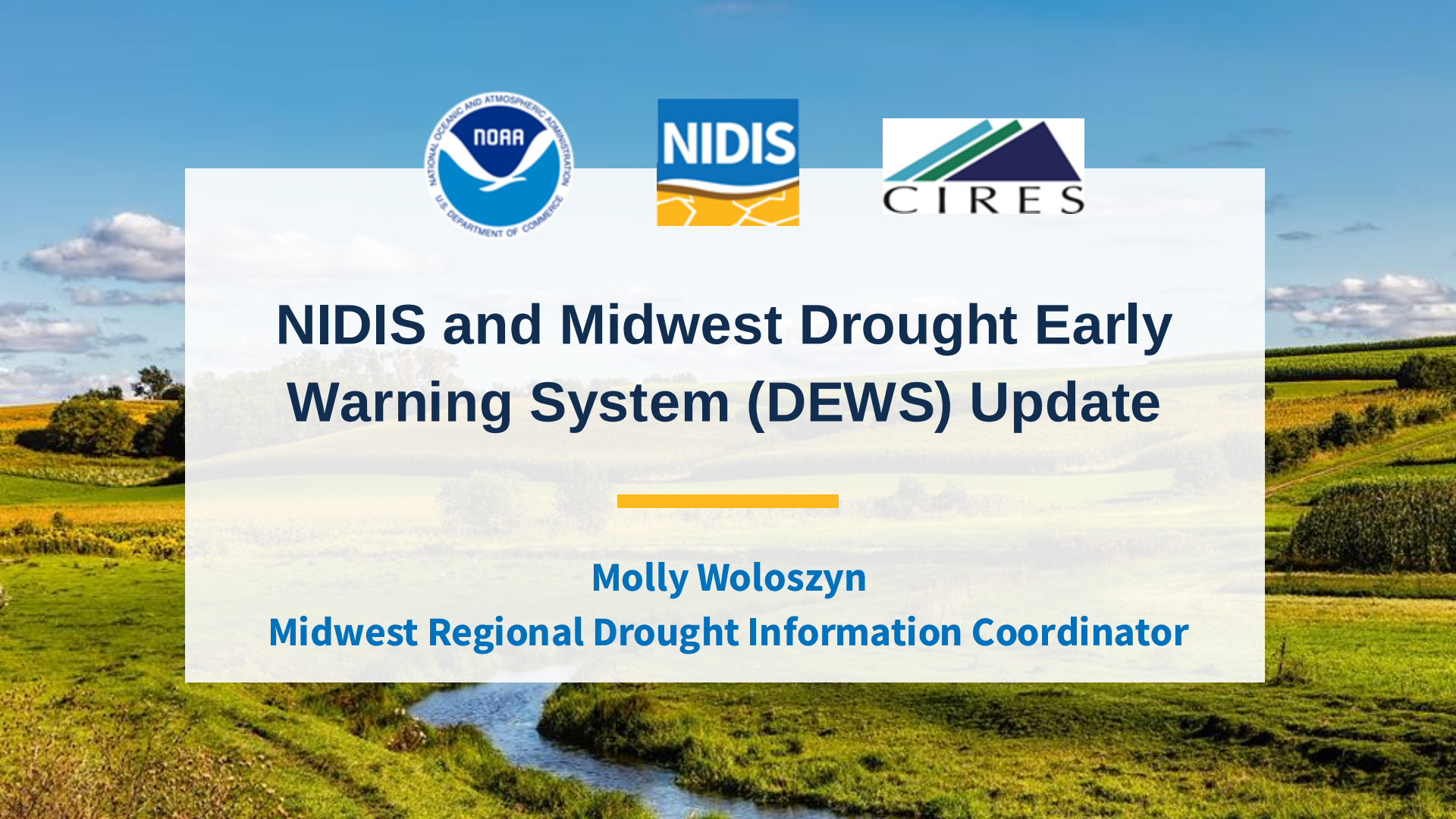


NIDIS and Midwest Drought Early Warning System (DEWS) Update

Molly Woloszyn

Midwest Regional Drought Information Coordinator

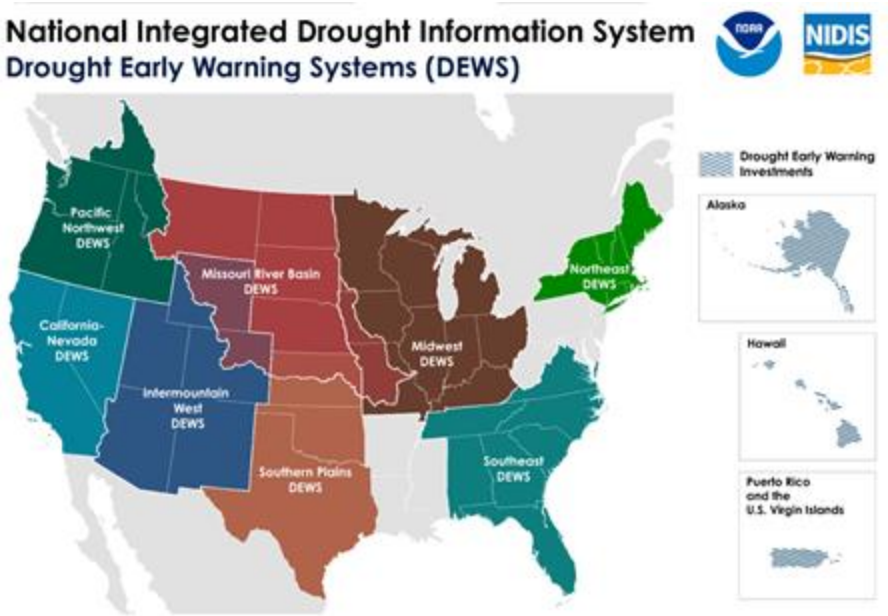
National Integrated Drought Information System (NIDIS)

NIDIS is a multi-agency partnership that coordinates drought monitoring, forecasting, planning, and information at federal, tribal, state, and local levels across the country.

How do we do this work?

- Advancing Regional Drought Early Warning Systems
- Improving drought prediction and forecasting
- Supporting drought planning and preparedness
- Supporting drought impact assessments
- Strengthening collaboration
- Leading the U.S. Drought Portal: www.drought.gov

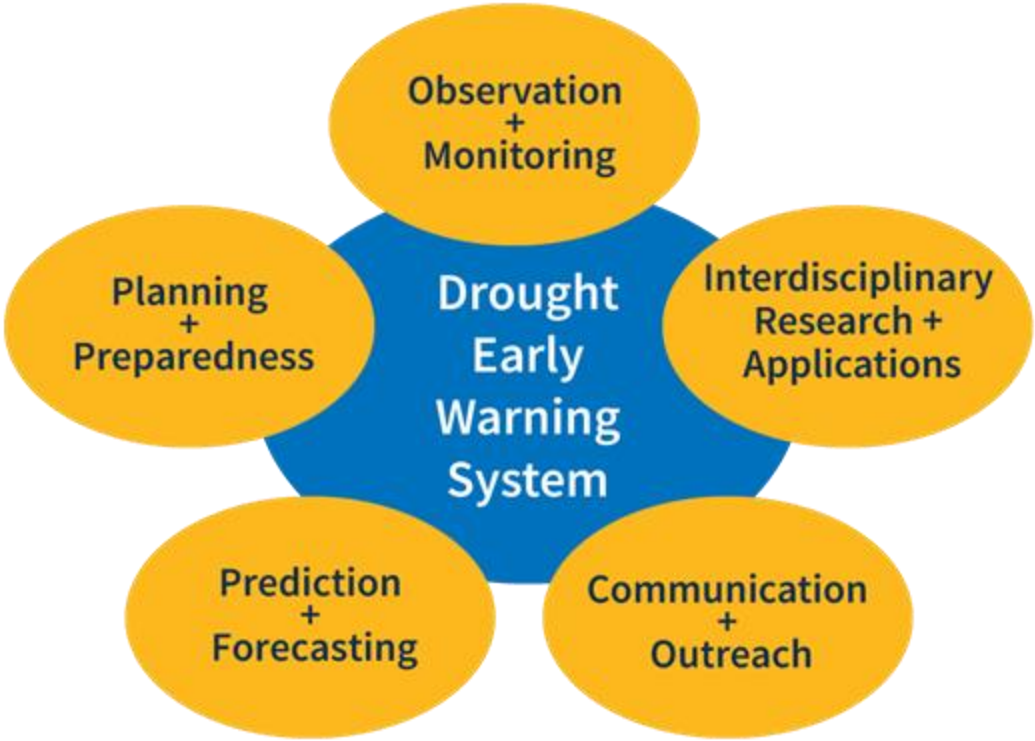
Enable the Nation to move **from a reactive to a more proactive** approach to managing drought risks and impacts



APPROACH

Drought Early Warning

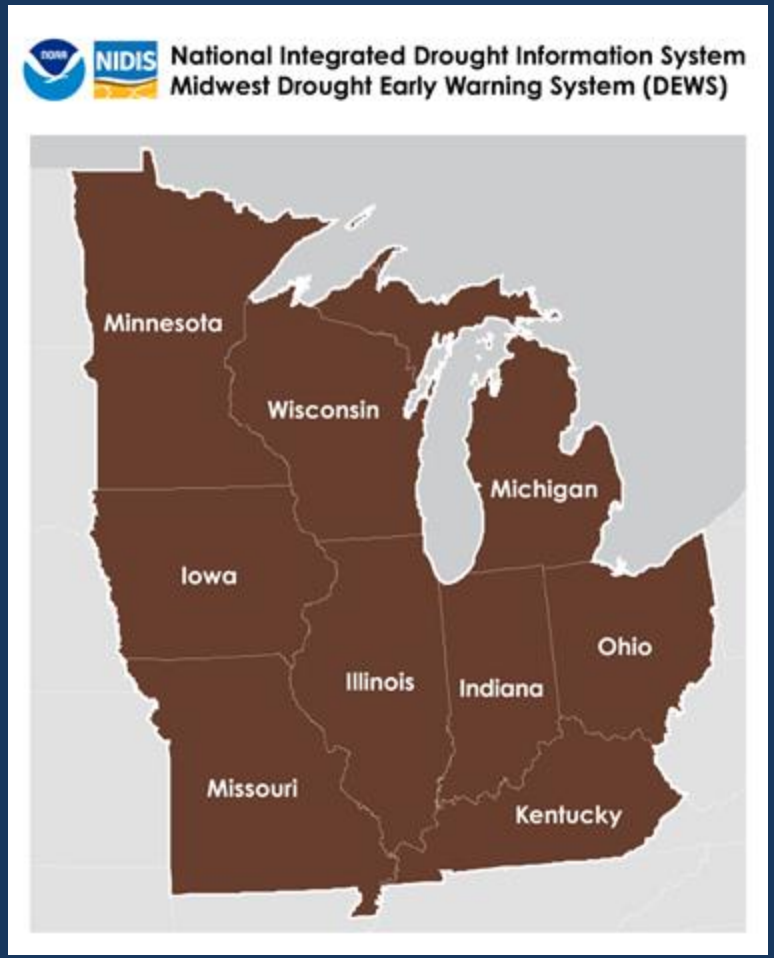
"Provision of **timely and effective information** that allows individuals exposed to a hazard to **take action** to avoid or **reduce their risk** and **prepare** for an effective response."



Unique Role of NIDIS

1. **Convening and Coordination**
   Partnerships, consultations, networks, workshops, etc.
2. **Delivering Information**
   Drought.gov, drought status updates, communications, etc.
3. **Advancing and Integrating Research Into Action**
   Applied research, products development, assessments

Interagency collaboration and partnerships are key to all we do!



History of the Midwest DEWS

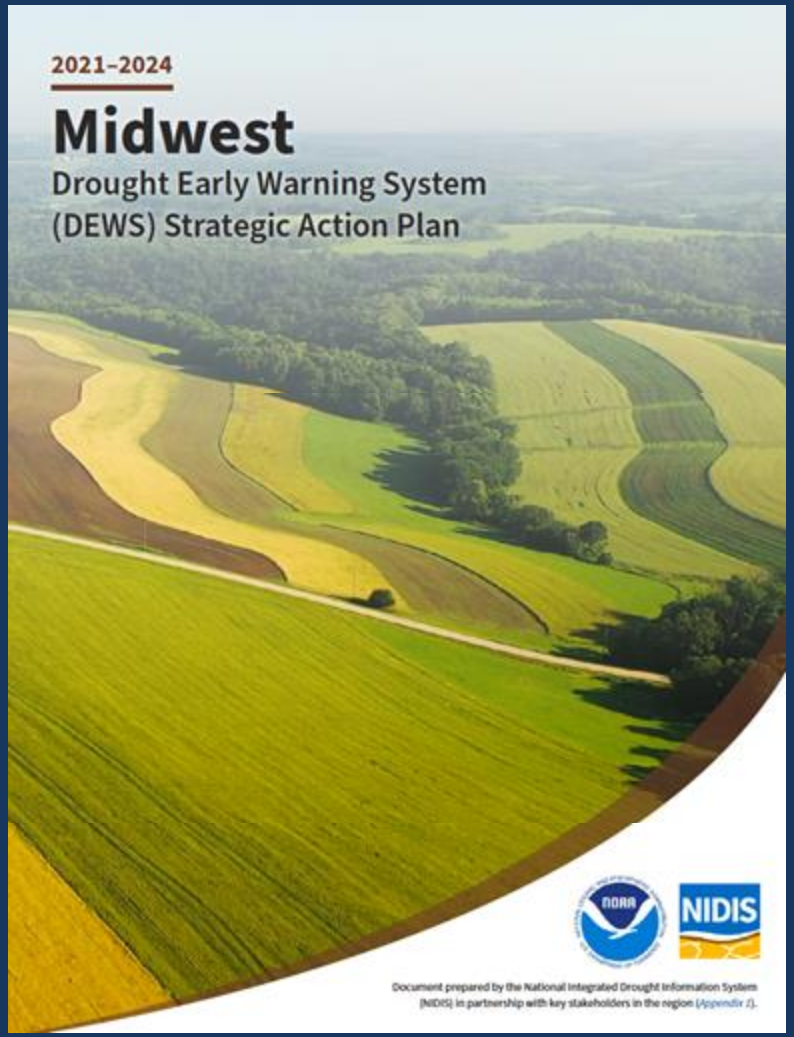
Officially launched February 2016

- **In response to 2012 drought in the central U.S.**

Past In-Person Meetings

- **February 2016:** St. Louis, Missouri
- **November/December 2016:** Champaign, Cincinnati, Cedar Rapids, Rochester
- **November 2019:** St. Paul, Minnesota
- **October 2022:** Omaha, Nebraska (joint with Missouri River Basin DEWS)

Latest development: Michigan is now officially part of the Midwest DEWS!



Midwest DEWS Strategic Plan 2021-2024

Identify drought indicators for Midwest DEWS by sector, season, location.

Increase understanding of characteristics, predictability, and risk of drought and the rapid transitions between hydrological extremes in the Midwest.

Identify innovative solutions and proactive measures for drought mitigation and response.

Enhance collaboration, coordination, and two-way communication among the Midwest DEWS network.

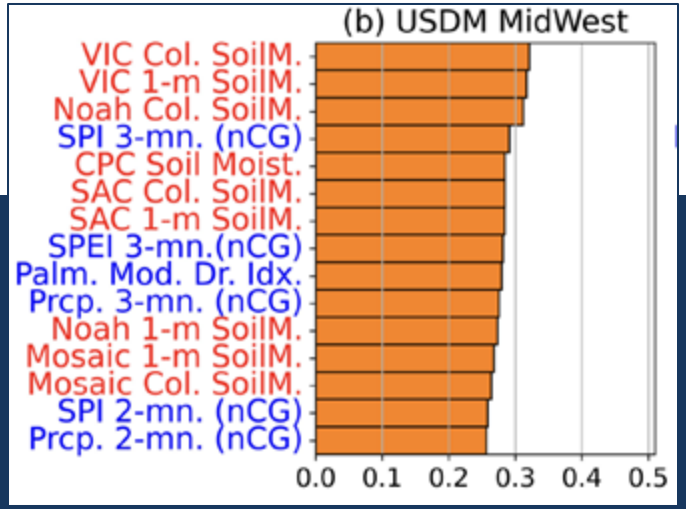
Integrate the Great Lakes watershed into the DEWS.

Midwest DEWS In Action

Supporting research to identify top drought indicators by region/season.

Midwest

- **Soil moisture**
- **Short-term SPI, SPEI, and precip**

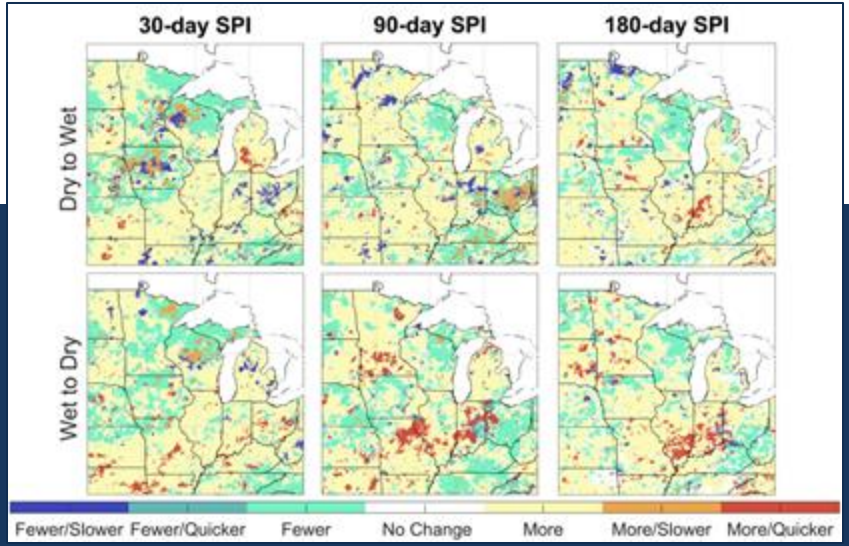


Supporting state's to identify state-specific drought indicators.

Ohio:

- **Improved drought monitoring through an impacts-based approach.**
- **Developed state-specific dashboard**

Midwest DEWS In Action

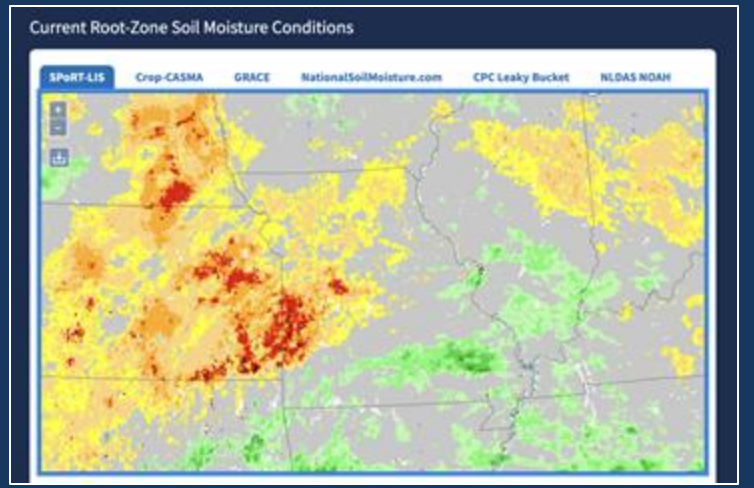


Understanding the complexity of Midwest drought.

- How often have we had rapid transitions between wet and dry conditions?
- How often is this expected in the future?

Improving the availability of data and products for regional monitoring.

- Soil moisture and evapotranspiration.



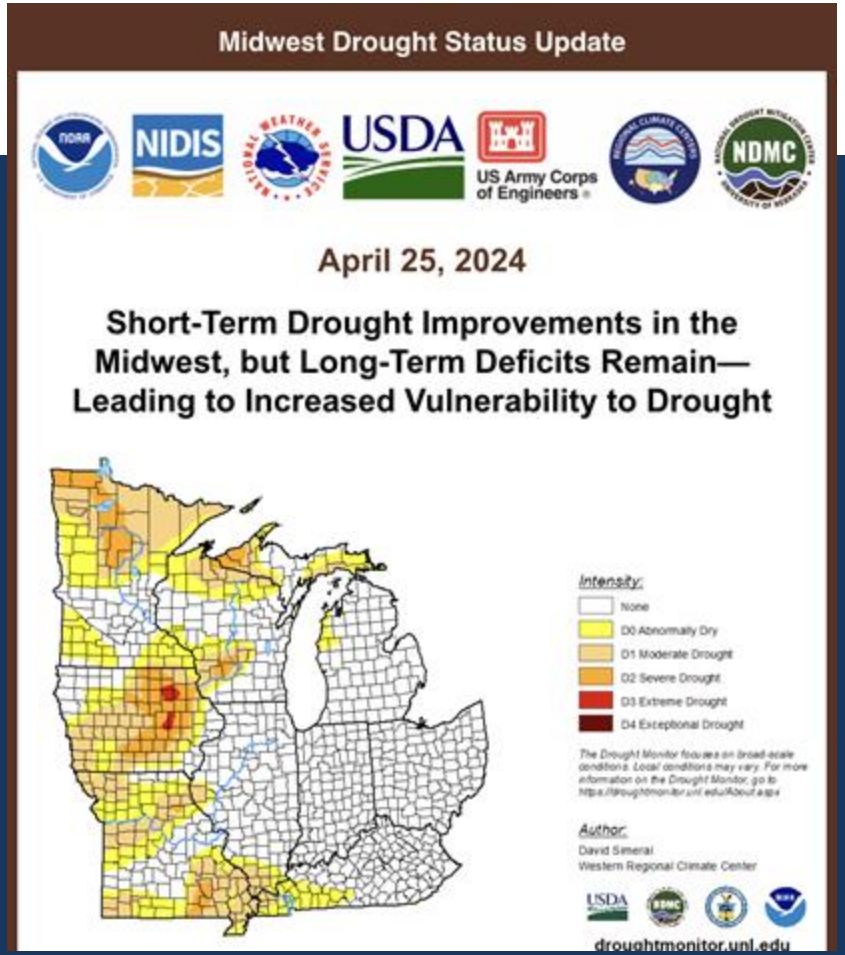
Midwest DEWS In Action

Identifying drought mitigation and response actions used across the Midwest.

- Available to share through a database to improve planning.

Conveying drought conditions, impacts, and outlooks.

- Through Drought Status Updates and webinars
- Provide key messages and value-added info for data/maps.



Midwest DEWS In Action

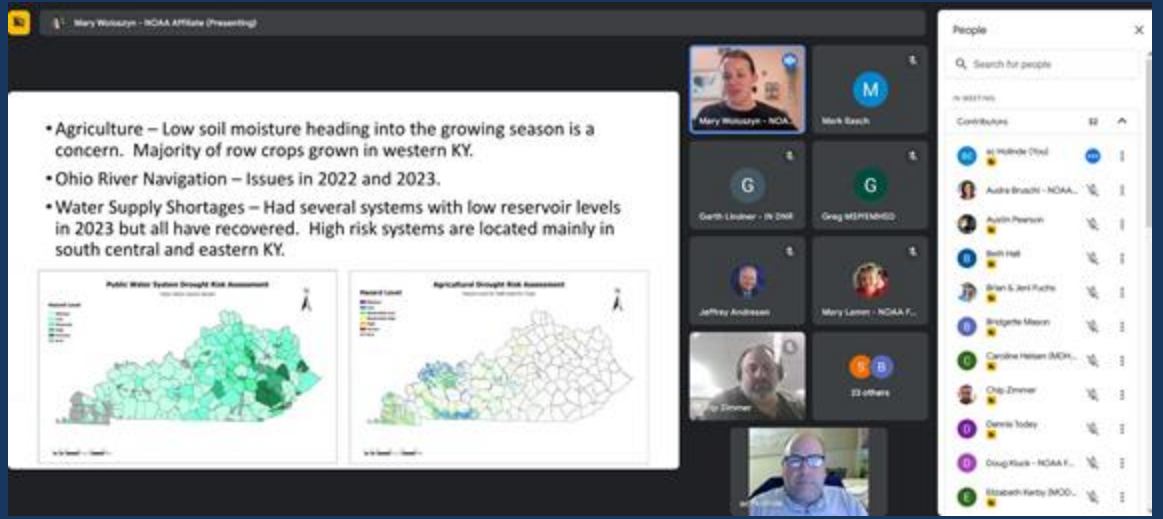
Providing opportunities to network across the region.

September 2023 virtual meeting:

- **State dialogue around drought planning - opportunity to learn from state's that had recently updated plans.**

April 2024 virtual meetings:

- **Taking stock of current conditions/concerns**
- **Conversation around availability of groundwater data**



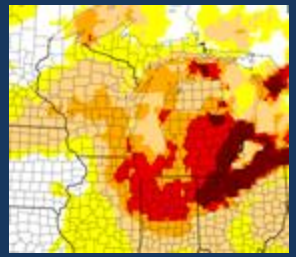
NATIONAL INTEGRATED DROUGHT INFORMATION SYSTEM (NIDIS)

NIDIS in Action Across the U.S.

Drought & Human Health

Drought & Wildfire

Flash Drought

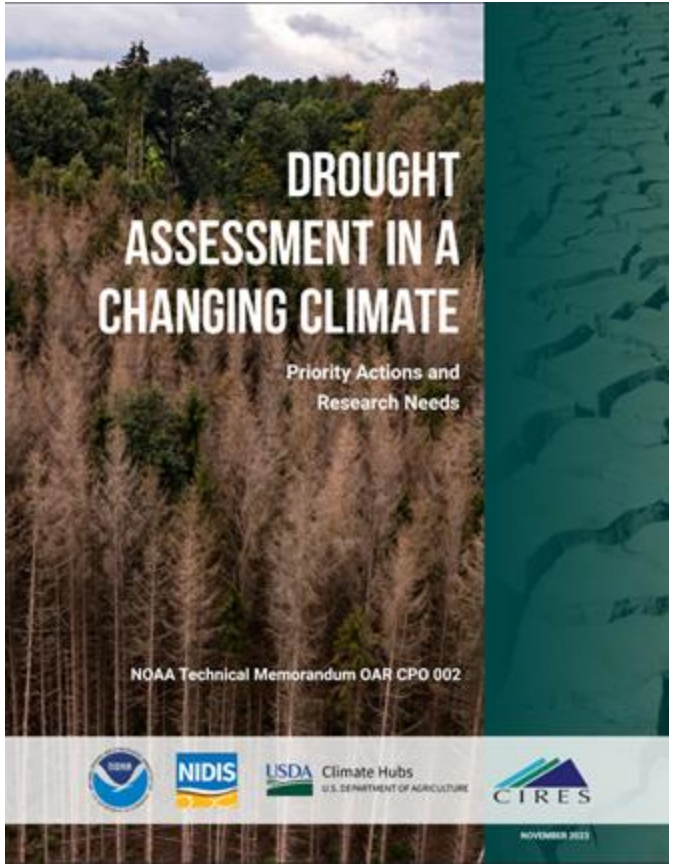


Drought Impacts & Indicators

National Coordinated Soil Moisture Monitoring Network

Drought in a Changing Climate

Drought Assessment in a Changing Climate



FY25 NIDIS CWD Competition: Understanding and Assessing Drought in a Changing Climate

Funding Opportunity: NOAA-OAR-CPO-2025-27758

Letter of Intent Deadline:
September 18, 2024 by 11:59p ET

Full Application Deadline:
December 9, 2024 by 11:59p ET

Competition Informational Webinar:
August 22, 2024 1:00pm ET

Post-Letter of Intent Informational Webinar:
October 23, 2024 1:00pm ET

Full Funding Announcement, Information Sheet, Applicant Checklist Links, and Webinar Registration

Questions? Britt.Parker@noaa.gov

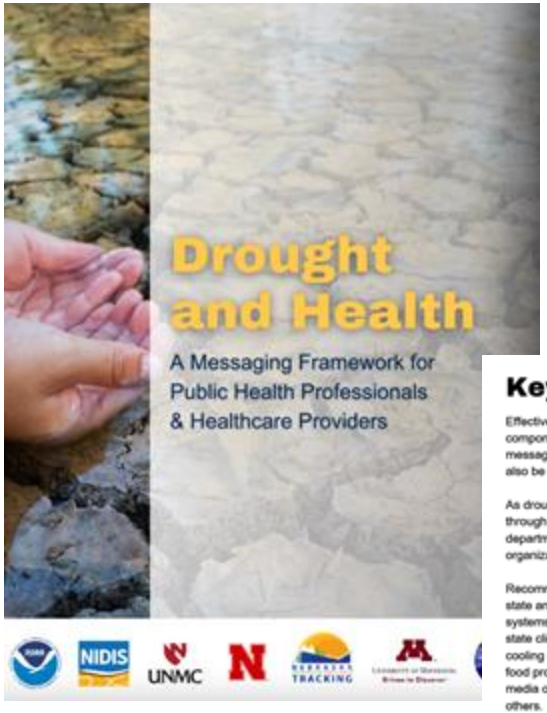
For more information: https://www.drought.gov/drought-research/coping-with-drought-competition or https://cpo.noaa.gov/understanding-and-assessing-drought-in-a-changing-climate-nidis/

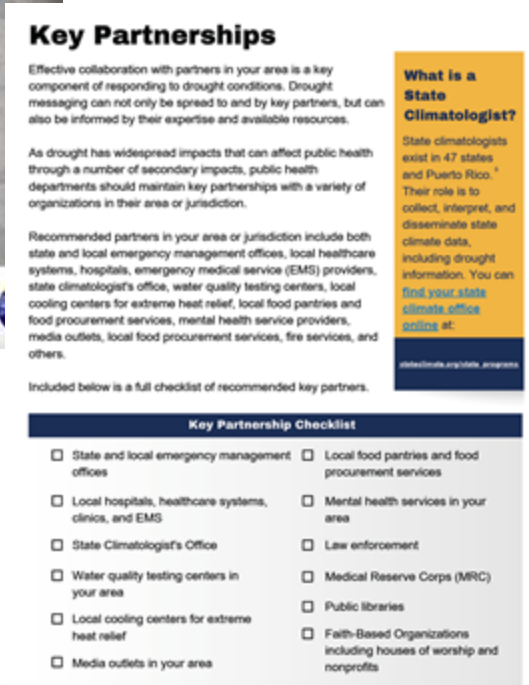
Drought and Health:
A Messaging Framework for Public Health Professionals and Healthcare Providers

This framework was designed to:

1) Provide a background on drought and its impacts on public health

2) Help public health professionals and healthcare providers choose messaging and response strategies targeted towards current drought impacts within their individual communities.





Key Partnerships

Effective collaboration with partners in your area is a key component of responding to drought conditions. Drought messaging can not only be spread to and by key partners, but can also be informed by their expertise and available resources.

As drought has widespread impacts that can affect public health through a number of secondary impacts, public health departments should maintain key partnerships with a variety of organizations in their area or jurisdiction.

Recommended partners in your area or jurisdiction include both state and local emergency management offices, local healthcare systems, hospitals, emergency medical service (EMS) providers, state climatologist's office, water quality testing centers, local cooling centers for extreme heat relief, local food pantries and food procurement services, mental health service providers, media outlets, local food procurement services, fire services, and others.

Included below is a full checklist of recommended key partners.

What is a State Climatologist?

State climatologists exist in 47 states and Puerto Rico.* Their role is to collect, interpret, and disseminate state climate data, including drought information. You can find your state climate office online at:

Key Partnership Checklist

- ☐ State and local emergency management offices
- ☐ Local hospitals, healthcare systems, clinics, and EMS
- ☐ State Climatologist's Office
- ☐ Water quality testing centers in your area
- ☐ Local cooling centers for extreme heat relief
- ☐ Media outlets in your area
- ☐ Local food pantries and food procurement services
- ☐ Mental health services in your area
- ☐ Law enforcement
- ☐ Medical Reserve Corps (MRC)
- ☐ Public libraries
- ☐ Faith-Based Organizations including houses of worship and nonprofits

2nd National Flash Drought Workshop Report:

Building on Progress and Looking Forward

Thank You!

Molly Woloszyn
Regional Drought Information Coordinator
molly.woloszyn@noaa.gov

www.drought.gov

National Integrated Drought Information System

@NOAADrought