

National Integrated Drought Information System (NIDIS)

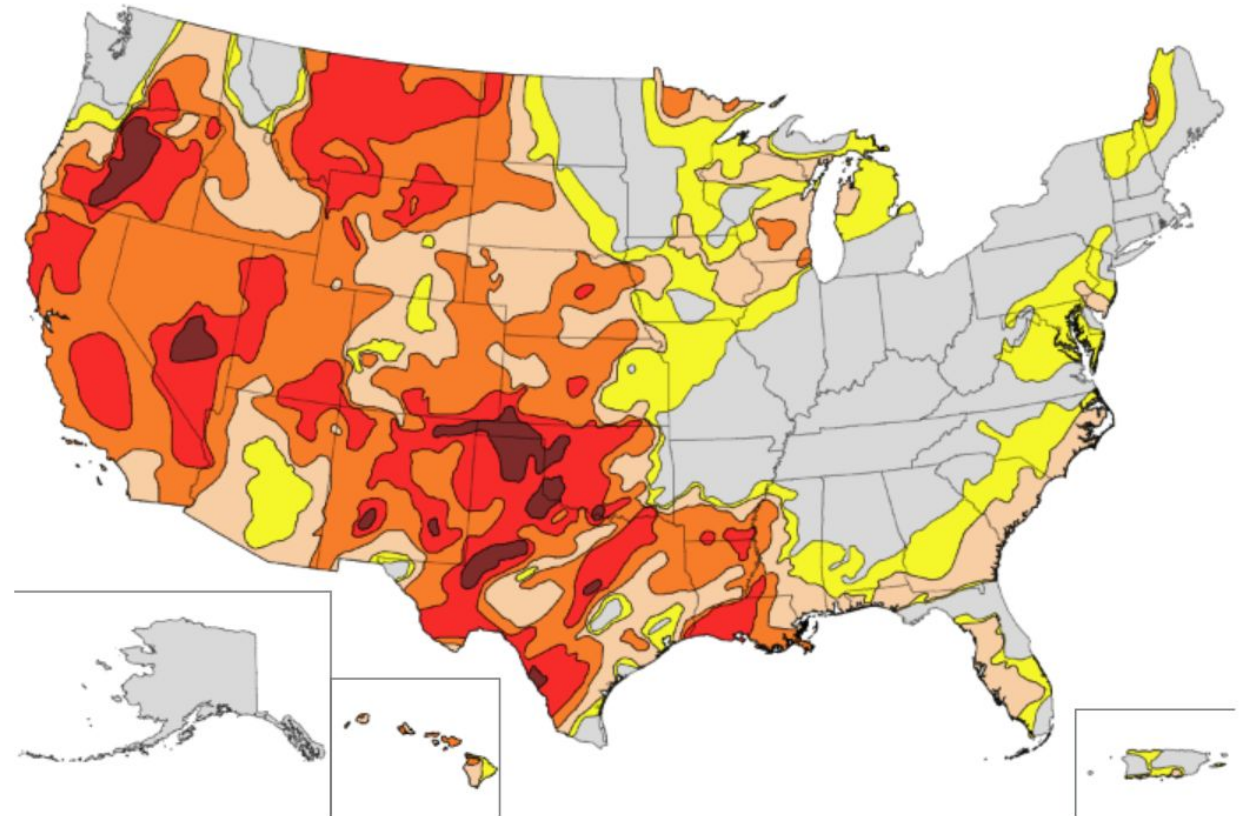
WSWC ICWP NWSA DC ROUNDTABLE MEETING
ELIZABETH OSSOWSKI | APRIL 5, 2022

U.S. Drought Monitor

March 29, 2021

48.5% of the United States
is in Drought

U.S. Drought Monitor



U.S. Drought Monitor Category

	D0 - Abnormally Dry
	D1 - Moderate Drought
	D2 - Severe Drought
	D3 - Extreme Drought
	D4 - Exceptional Drought

% of U.S.

58.2%
48.5%
34.5%
14.3%
1.6%

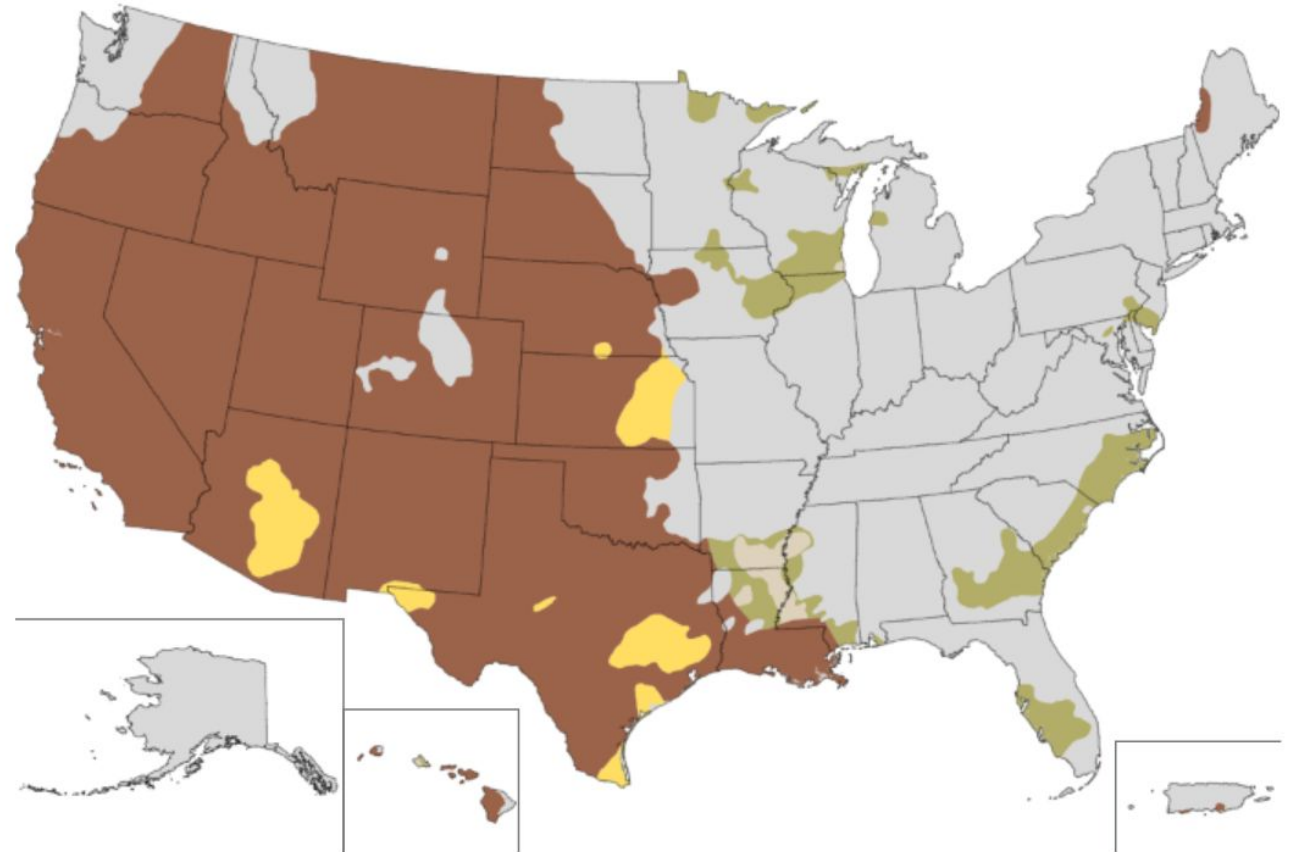
Source(s): NDMC, NOAA, USDA
Updates Weekly - 03/29/22

Drought.gov

U.S. Seasonal Drought Outlook

Valid for April 1 -
June 30, 2022

U.S. Seasonal (3-Month) Drought Outlook



Drought Outlook Category

-  Drought persists
-  Drought remains but improves
-  Drought removal likely
-  Drought development likely

% of U.S.

- 32.1%
- 2.2%
- 5.3%
- 8.9%

Source(s): CPC

Updates Monthly - 03/31/22

Drought.gov

About NIDIS



- Authorized by Congress in 2006 and reauthorized in 2014 and 2019 with strong bipartisan support. Authorization expires at the end of FY23.
- Develop and provide a national drought early warning information system.
- Enable the Nation to move from a reactive to a proactive approach to drought risk management.
- Engage in partnerships and consultation with Federal, tribal, state, and local partners, as well as the private sector, academic institutions, and citizen scientists.
- \$13.5 million authorization of annual appropriations:
 1. Drought Predictions and Forecasting
 2. Interdisciplinary Research and Applications
 3. Drought Planning and Preparedness
 4. Drought Observations and Monitoring
 5. Drought Communication and Outreach



New Perspectives 2006-2022



2022

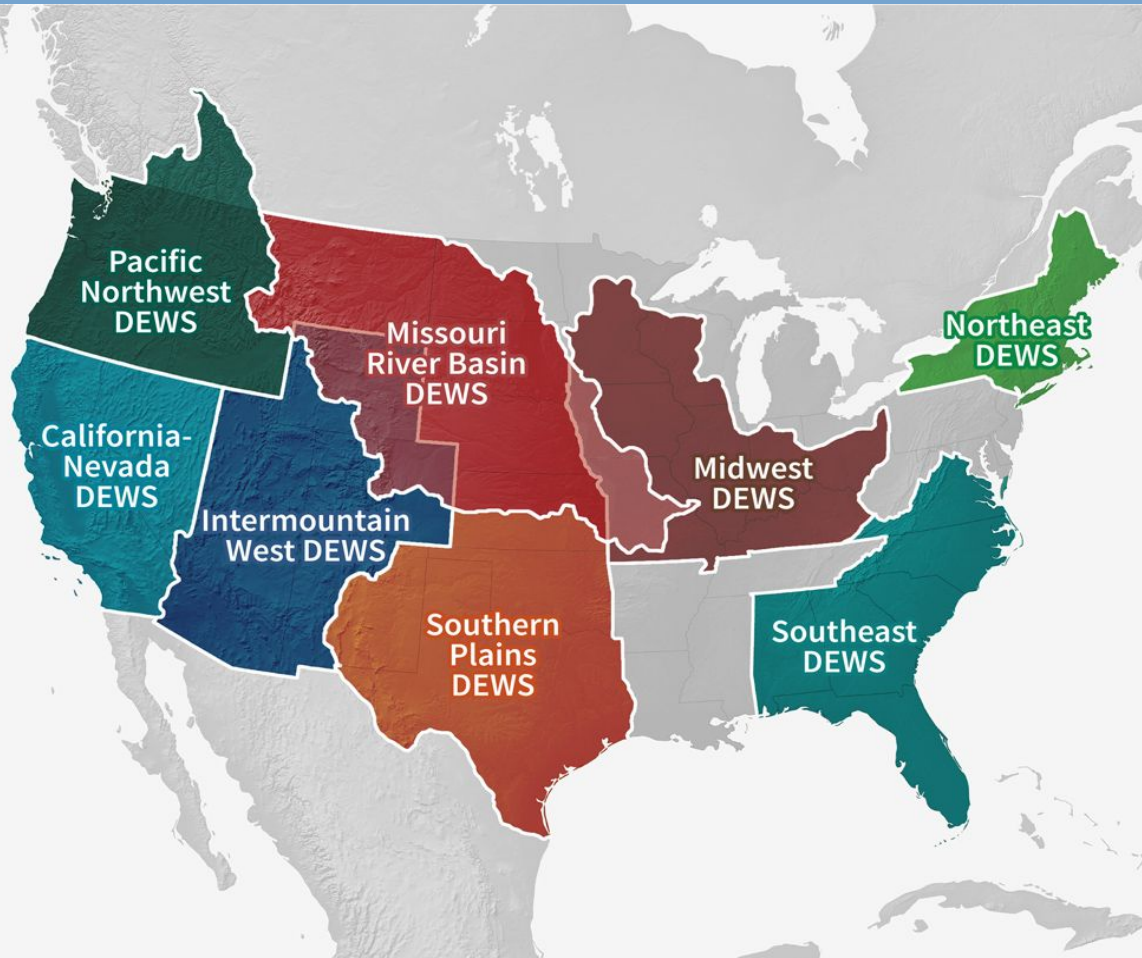
Towards a
National
Drought Early
Warning
System

2014

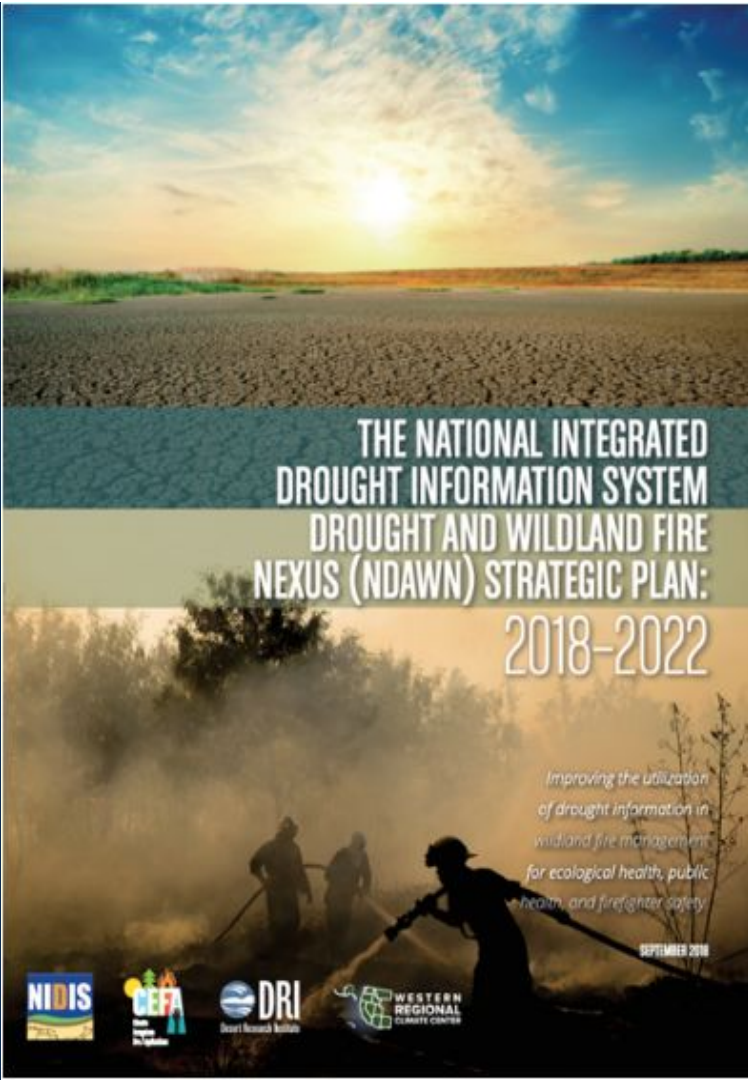
Multi-regional,
Multi-hazard
Drought
Information

2006

Regional
Stakeholder-led
Ground-Up
Approach



NIDIS Drought and Wildland Fire Nexus (NDAWN) Strategy



NDAWN Goals & Research Themes



Knowledge Exchange



Science & Research: Fuels



Tool Development



Science & Research: Post-Fire Recovery



Science & Research: Climate and Antecedent Conditions



Communication

Drought Response: Communicating Authoritative and Timely Drought Information



NEWS & EVENTS

NIDIS Drought Alert Emails: Get Local Drought Conditions in Your Inbox

NIDIS drought email alerts provide up-to-date local drought information right to your inbox. Since the launch of the new Drought.gov at the beginning of 2021,

Intermountain West Drought Early Warning System

DLN | USDA Southwest Climate Hub | U.S. DEPARTMENT OF AGRICULTURE | NIDIS National Integrated Drought Information System



Southwest Drought Briefing: A Focus on Snowpack

**Tuesday, April 5, 2022
1:00 – 2:00 pm MT (12:00 pm PT)**

The Southwest has experienced an on-again, off-again winter snow pattern. As we prepare for the spring snowmelt, moderate to exceptional drought persists across the region. This drought briefing will focus on winter drought conditions and forecasts for spring for Arizona, Colorado, New Mexico, Nevada, and Utah. It will also take a closer look at April 1 snowpack conditions along with a deeper dive into snow measurement networks and how snowpack is measured across the West.

Presentations

Drought Conditions Update
Dave Simeral | Desert Research Institute

Snowpack Conditions
Jordan Clayton | Utah Snow Survey, USDA, Natural Resources Conservation Service

Runoff and Streamflow Forecast
TBD | Colorado Basin River Forecast Center

California-Nevada Drought Update

NOAA | NIDIS | CNAP | Western Regional Climate Center | DRI

March 15, 2022

Drought Status Update for California-Nevada

After a soggy start, California and Nevada remain in drought as the wet season comes to a dry close.

This Drought Status Update is issued in partnership between the National Oceanic and Atmospheric Administration (NOAA) and the California-Nevada Applications Program, a NOAA RISA team, and the Western Regional Climate Center at the Desert Research Institute to communicate the current state of drought conditions in California-Nevada based on recent conditions and the upcoming forecast. NIDIS and its partners will issue future Drought Updates as conditions evolve.

[Register here](#) for the March 28 CA/NV Drought & Climate Update and Outlook Webinar

Key Points

- January and February 2022 were the driest on record for those two months for much of the California and Nevada region. The dry January and February have decreased the odds of reaching normal water year precipitation and have led to the continuation of drought throughout the region.
- Extended range forecasts indicate a continuation of a dry weather pattern through the end of March for California and Nevada, bringing the climatological wet season to a dry close.

The rest of this drought update, including current conditions, outlooks, and impacts, is available online.

[Access the Full Drought Update](#)

Southwest: Long-term Drought and Aridification

September 21-22 and 28-29, 2021



2021 Southwest Drought Virtual Forum

Hosted by NOAA's National Integrated
Drought Information System (NIDIS)

- Enhance Drought Response to Address Water Scarcity in Underserved and Overburdened Communities
- Integrate Land Use Planning and Cascading Hazards Information into Drought and Climate Planning Resources
- Consider Small Businesses and Small Communities in Drought Resilience and Response Measures
- Invest in Research on Drought and Aridification in the Southwestern U.S., including Social Science
- Strengthen Financing and Research for Implementing Nature-Based Drought Solutions
- Support Improvements to Subseasonal to Seasonal Forecasting for Drought Decision-Making
- Address Remaining Barriers to Coordination Across Levels of Government and Sectors

U.S. Drought Portal (Drought.gov)



The screenshot shows the Drought.gov website interface. At the top, there is a dark blue header with the NOAA logo, the NIDIS logo, and the text "Drought.gov National Integrated Drought Information System". Below this is a navigation bar with links: Home, Data and Maps, By Sector, By Location, Research and Learn, About, and News and Events. The main content area features a large banner with a background image of a dry, brown field. The banner text reads: "Exceptional Drought Continues to Expand in the Southern Plains" followed by a paragraph: "42% of the Southern Plains is in extreme to exceptional drought (D3-D4), and drought is likely to worsen in the coming weeks and months—raising concerns for agricultural impacts going into the growing season. Learn more in the March 17 Southern Plains Drought Status Update." To the right of the banner, there is a section titled "FEATURED NEWS AND ARTICLES" with two entries: "Recap: March California-Nevada Drought & Climate Outlook Webinar" and "Research Spotlight: Climate-Driven Megadrought". Below these entries is a link: "Sign Up for Drought Alert Emails". At the bottom of the banner, there is a section titled "How is drought affecting your neighborhood?" with a text input field labeled "Enter city or zip code". Below the banner, there is a section titled "Advancing Drought Science and Preparedness Across the Nation" with a paragraph: "The National Integrated Drought Information System (NIDIS) is a multi-agency partnership that coordinates drought monitoring, forecasting, planning, and information at national, tribal, state, and local levels."

- Multi-agency web portal that increases awareness and access of drought monitoring, forecasting, and information
- **New:** Up-to-date drought conditions from the **city and county level**
- **New:** Interactive maps and data, including **historical drought information** (up to 2,000 years)
- **New:** “**By Sector**” section, showing drought impacts on different economic sectors
- **New:** Research and Learn section where you can “go back to the basics” on drought

State-of-the-Art Probabilistic Drought Outlooks

- NOAA's Climate Prediction Center (CPC) and NIDIS are collaborating to develop state of the art, objective, probabilistic drought outlooks, which will have the following features:
 - Co-development with stakeholders to inform their decision making contexts.
 - Availability of a long, consistent set of historical predictions, allowing establishment of skill and confidence levels.
 - Robust framework for testing future improvements.
- Skill of these tools will ultimately depend on skill of precipitation and evaporation predictions so we still need to focus on improving these.

Our Measurable Impact

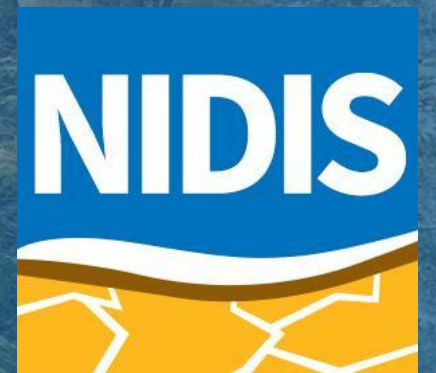


38	U.S. States Served by a Regional DEWS
13,920	Regional DEWS Stakeholders
47	Research Projects/Resource Developments ongoing/completed
88	Webinars and Virtual Workshops (in 2021)
10K	Twitter Followers
8.8M	Tweet Impressions (in 2021)
2,096	Facebook Followers
479	YouTube Subscribers
21,318	YouTube Videos Views (in 2021)
4,015	NIDIS Biweekly Newsletter Dry Times Subscribers

Strategic Lookahead



- Build out the National DEWS
- Enhancing Drought Monitoring and Forecasting
- Drought and Climate Change in the Western United States
- Drought Vulnerability and Underserved Populations
- Cost of Drought
- Localized, Targeted Drought Information



Federal Collaboration on Drought

2021: Interagency Drought Relief Working Group

- From National Climate Task Force
- Address worsening drought in the West
- Co-Chairs: USDA, DOI

2021: Interagency Council for Advancing Meteorological Services

- NIDIS serves on Drought Services Team, Subcommittee on Water Information and Services
- Co-Chairs: EPA, NIDIS, USDA

2020: Water Subcabinet

- From Executive Order
- Coordinate water resource management across the Federal government
- Co-Chairs: USDA, EPA
- NIDIS serves on Tribal Team

2016: National Drought Resilience Partnership

- From 2016 Presidential Memorandum
- Coordinate Federal drought resilience efforts, mid- to long-term strategies
- Co-Chairs: USDA, DOI

2008: Western States Federal Agency Support Team

- Improve the effectiveness of collaboration and seek solutions to water issues across Western States.

2006: National Integrated Drought Information System

- Public Law
- Interagency mandate to create national drought early warning system, integrate drought research
- Housed in DOC/NOAA

Thank You



@DroughtGov



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National Integrated Drought
Information System



(NIDIS) - NOAA Service
Account

