Department of Commerce • National Oceanic & Atmospheric Administration • National Weather Service

NATIONAL WEATHER SERVICE INSTRUCTION 10-1201 OCTOBER 1, 2024 Operations and Services Drought Services, NWSPD 10-12 WFO/WSO DROUGHT PRODUCTS SPECIFICATION

NOTICE: This publication is available at: https://www.weather.gov/directives/.

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Type of Issuance: Routine

SUMMARY OF REVISIONS: This directive supersedes NWSI 10-1201, "WFO/WSO Drought Products Specification" dated November 7, 2023.

This instruction has been updated for the following:

- 1. Significant changes to sections 2.2 and 2.3 to reflect the content and format of the modernized Drought Information Statement. The modernized Drought Information Statement was transitioned to operational status April 1, 2024.
- 2. Removed Appendix A. Best practices for WFO/WSO drought services will be shared by the Climate Services Program and Water Resources Services Program and/or described by a regional supplement.
- 3. Replaced Appendix B with new Appendix A to show sample content from a modernized Drought Information Statement product.

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September 17, 2024

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Date

WFO/WMO Drought Products Specification

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1 Introduction

This instruction describes issuance criteria, content and format of drought products provided by Weather Forecast Offices (WFOs) and Weather Service Offices (WSOs) in the National Oceanic and Atmospheric Administration's (NOAA) National Weather Service (NWS).

All WFO/WSO drought products issued through NWS-supported dissemination systems follow certain identification and dissemination standards. Basic standards for text products, including those for World Meteorological Organization (WMO) headers, Advanced Weather Interactive Processing System (AWIPS) identifiers, Universal Geographic Codes (UGC), Mass News Dissemination (MND) header blocks and product content are contained in *NWSI 10-1701*, *Text Product Formats and Codes*

(https://www.weather.gov/media/directives/010_pdfs/pd01017001curr.pdf). Specific standards for UGCs are contained in *NWSI 10-1702*, *Universal Geographic Code (UGC)* (https://www.weather.gov/media/directives/010_pdfs/pd01017002curr.pdf).

2 Drought Information Statement (DGT)

Drought Information Statements (DGTs) provide up-to-date reports on the current drought situations in a WFO/WSO county warning and forecast area.

2.1 Mission Connection

Drought Information Statements help the NWS meet its mission by:

- 1. Providing a summary of current drought severity, indices, data, impacts, forecasts, and products, and
- 2. Providing pertinent information to partners and other users, thereby enhancing their ability to focus drought mitigation efforts on areas of greatest need.

As a result, Drought Information Statements help protect property and support the national economy.

Note that WFO water resources products are described in NWS Instruction 10-922 (https://www.weather.gov/media/directives/010 pdfs/pd01009022curr.pdf).

2.2 Issuance Guidelines

2.2.1 Creation Software

Drought Information Statements are generated using the modernized DGT template in Google Slides, customized to each WFO/WSO.

A Google Folder, available to all NWS personnel, contains all of the material needed to prepare for, create and issue a Drought Information Statement product. Key materials include:

- "First time setup": This instruction is for WFOs/WSOs that have never set up or issued a modernized DGT product. WFO/WSO staff should read this instruction and complete all steps prior to first issuing their first DGT.
- "DGT creation and issuance": This instruction is meant to help WFOs/WSOs create and issue a modernized DGT product using the Google Slides template.
- "Updates from the previous version of the DGT template and instructions": This instruction is meant to summarize changes to the DGT template from the previous version, and prepare WFOs/WSOs to issue their next DGT in the correct format.
- "DGT template": WFOs/WSOs will copy this Google Slides file into a local directory, then customize the template with their WFO/WSO contact information and locally-appropriate content and graphics.
- "DGT webpage template": WFOs/WSOs will copy this template into their local Content Management System, then customize to reflect the correct WFO/WSO name.
 - Drought Information Statement training webinars
 - Sample Drought Information Statement products

2.2.2 Issuance Criteria

Drought intensity, as indicated by the U.S. Drought Monitor (http://droughtmonitor.unl.edu), is the primary criterion used in determining when an initial Drought Information Statement is issued. An initial Drought Information Statement shall be issued when the U.S. Drought Monitor indicates a drought intensity at the D3 level or greater in any portion of the WFO/WSO county warning and forecast area. An initial Drought Information Statement may be issued when the U.S. Drought Monitor indicates a drought intensity at the D1 or D2 level and/or if local drought impacts have been reported.

Alternate criteria for issuance of initial Drought Information Statements may be specified in regional supplements.

WFOs/WSOs routinely check the weekly U.S. Drought Monitor to assess drought conditions in the county warning and forecast area. The U.S. Drought Monitor depiction of drought intensity represents a consensus of drought indicators (e.g., precipitation, streamflow, groundwater, soil moisture) as defined by prescribed percentile ranges (D4: 0-2 percentile, etc.).

Once an initial Drought Information Statement has been issued, follow-up Drought Information Statements are issued at least once per month. More frequent issuance of the Drought Information Statement may be issued under the following circumstances:

- 1. When drought conditions change, or
- 2. When a local or regional criterion warrants an update.

2.2.3 Issuance Time

Drought Information Statements are non-scheduled, event-driven products. As operational schedules allow, Drought Information Statements should be prepared and issued following the issuance of the U.S. Drought Monitor on Thursdays.

2.2.4 Valid Time

A Drought Information Statement is valid until the time/date specified in the product UGC.

2.2.5 Product Expiration Time

The product expiration time (at the end of the UGC) may be as long as 35 days after product issuance.

2.2.6 Product Archiving

NWS Headquarters staff collaborate with the drought.gov team and the National Centers for Environmental Information (NCEI) to collate and archive DGT products once per calendar year. The file collation and archiving process begins January 1st of each calendar year. Approximately March 1st, WFOs will be notified that they may delete DGT-related files from the previous calendar year from their local Content Management System.

2.3 Technical Description

2.3.1 UGC Type

County codes will be used (Zone for Alaska and parts of Pacific Region).

2.3.2 MND Product Type Line

"DROUGHT INFORMATION STATEMENT."

2.3.3 Content

A title slide, U.S. Drought Monitor, recent precipitation, summary of impacts, and drought outlook are required for each Drought Information Statement. Each slide includes a graphic, image caption, and key messages associated with the graphic. See Appendix A for a sample Drought Information Statement.

Drought Information Statements may include additional content, tailored to the local drought conditions and impacted sectors. Optional content may discuss:

- One-week or four-week change in drought intensity from the U.S. Drought Monitor
- Recent temperature and temperature anomalies
- Hydrologic conditions
- Agricultural and/or fire weather impacts
- Short-term precipitation forecasts
- Rapid onset drought outlook
- Extended range, monthly and seasonal climate outlooks

2.3.4 Format

Content added into the Google Slides template is saved as a PDF file, which serves as the official NWS product, and uploaded to a Drought Information Statement-specific WFO/WSO webpage. A TXT file, also uploaded to the Drought Information Statement-specific WFO/WSO webpage, serves as an accessible, text-only companion to the PDF. See Appendix A for sample Drought Information Statement content in PDF and TXT formats.

AWIPS issuance of the Drought Information Statement provides users with links to the PDF and TXT files, as shown in Figure 1. The date field is updated with each DGT issuance, to reflect the 8-digit product issuance date, in "MMDDYYYY" format. No additional content will be changed or added to the AWIPS formatter as shown in Figure 1.

The Drought Information Statement template and instructions are subject to change i.e., to incorporate additional and/or improved regional graphics, drought indicators and accessibility features. Substantial changes will be made available for comment/review prior to implementation and notification provided via NWS Public Information Statements/Service Change Notices.

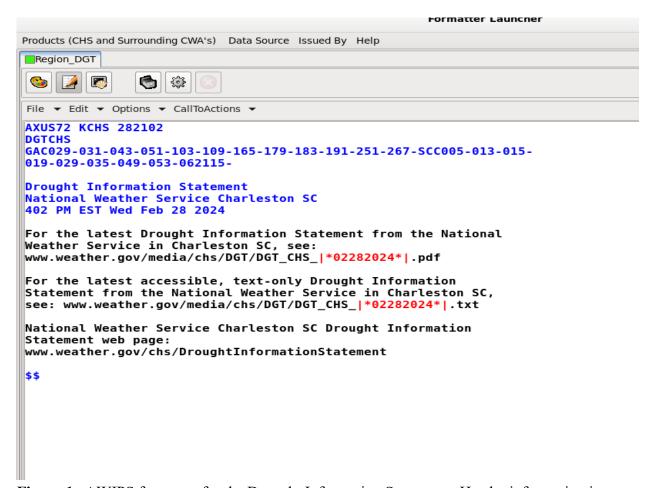


Figure 1: AWIPS formatter for the Drought Information Statement. Header information is shown in blue text. The 8-digit product issuance date field is shown in red text.

2.3.5 Availability

Drought Information Statements are available at DGT-specific WFO/WSO webpages.

WFOs/WSOs use the webpage naming convention:

https://weather.gov/[WFO/WSO]/droughtinformationstatement, where [WFO/WSO] represents the WFO or WSO's three-letter code. For example, see

https://www.weather.gov/ewx/DroughtInformationStatement for WFO Austin/San Antonio's DGT webpage.

WFOs/WSOs follow the specified file name conventions for Drought Information Statement products:

- For the PDF file that includes graphics and weblinks: "DGT_[WFO/WSO 3 letter ID]_MMDDYYYY.pdf". For example, "DGT_EWX_07252023.pdf"
- For the TXT accessible, text-only file: ""DGT_[WFO/WSO 3 letter ID] MMDDYYYY.txt". For example, "DGT_EWX_07252023.txt"

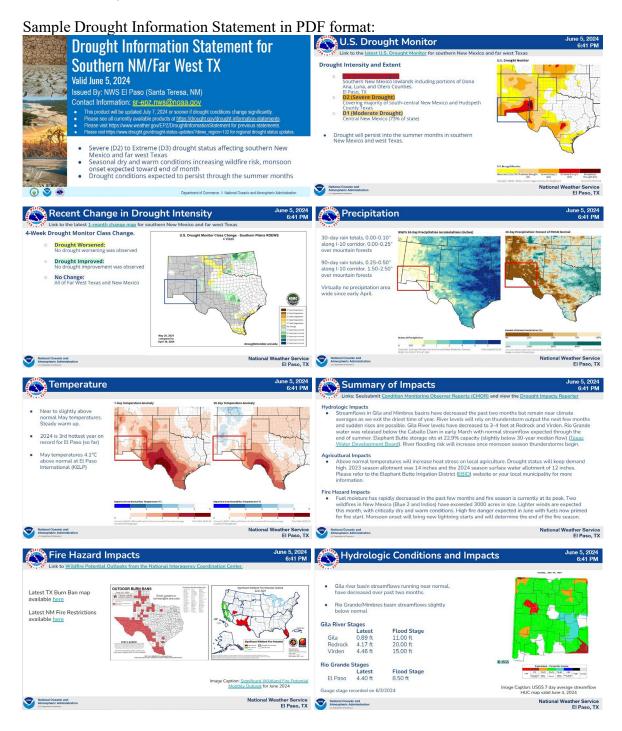
Additionally, Drought Information Statements are linked from a centralized, national page at drought.gov within one day of issuance: https://www.drought.gov/drought-information-statements.

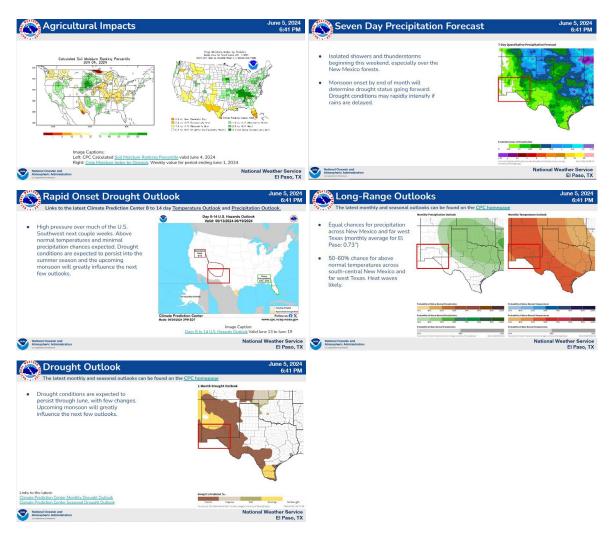
2.4 Updates, Amendments, and Corrections

Provide updates by issuing a new product. Amendments are not applicable to this product. Follow standard NWS practices for corrections.

APPENDIX A - Sample Drought Information Statement

Sample content for the Drought Information Statement, excerpted from a product issued by WFO El Paso June 5, 2024.





Sample Drought Information Statement in TXT format:

Drought Information Statement for Southern NM/Far West TX

Valid June 5, 2024

Issued By: NWS El Paso (Santa Teresa, NM)

Contact Information: sr-epz.nws@noaa.gov

This product will be updated July 7, 2024 or sooner if drought conditions change significantly.

Please see all currently available products at https://drought.gov/drought-information-statements.

Please visit https://www.weather.gov/EPZ/DroughtInformationStatement for previous statements.

Please visit https://www.drought.gov/drought-status-updates/?dews_region=132 for regional drought status updates.

Severe (D2) to Extreme (D3) drought status affecting southern New Mexico and far west Texas

Seasonal dry and warm conditions increasing wildfire risk, monsoon onset expected toward end of month

Drought conditions expected to persist through the summer months

U.S. Drought Monitor

Link to the latest U.S. Drought Monitor for southern New Mexico and far west Texas

Drought Intensity and Extent

D3 (Extreme Drought)

Southern New Mexico lowlands including portions of Dona Ana, Luna, and Otero Counties.

El Paso, TX

D2 (Severe Drought)

Covering majority of south-central New Mexico and Hudspeth County Texas D1 (Moderate Drought)

Central New Mexico (73% of state)

Drought will persist into the summer months in southern New Mexico and west Texas.

Recent Change in Drought Intensity

Link to the latest 1-month change map for southern New Mexico and far west Texas

4-Week Drought Monitor Class Change.

Drought Worsened:

No drought worsening was observed

Drought Improved:

No drought improvement was observed

No Change:

All of Far West Texas and New Mexico

Precipitation

30-day rain totals, 0.00-0.10" along I-10 corridor. 0.00-0.25" over mountain forests

90-day rain totals, 0.25-0.50" along I-10 corridor. 1.50-2.50" over mountain forests

Virtually no precipitation area wide since early April.

Temperature

Near to slightly above normal May temperatures. Steady warm up.

2024 is 3rd hottest year on record for El Paso (so far)

May temperatures 4.1°C above normal at El Paso International (KELP)

Summary of Impacts

Links: See/submit Condition Monitoring Observer Reports (CMOR) and view the Drought Impacts Reporter

Hydrologic Impacts

Streamflows in Gila and Mimbres basins have decreased the past two months but remain near climate averages as we exit the driest time of year. River levels will rely on thunderstorm output the next few months and sudden rises are possible. Gila River levels have decreased to 3-4 feet at Redrock and Virden. Rio Grande water was released below the Caballo Dam in early March with normal streamflow expected through the end of summer. Elephant Butte storage sits at 22.9% capacity (slightly below 30-year median flow) (Texas Water Development Board). River flooding risk will increase once monsoon season thunderstorms begin.

Agricultural Impacts

Above normal temperatures will increase heat stress on local agriculture. Drought status will keep demand high. 2023 season allotment was 14 inches and the 2024 season surface water allotment of 12 inches. Please refer to the Elephant Butte Irrigation District (EBID) website or your local municipality for more information.

Fire Hazard Impacts

Fuel moisture has rapidly decreased in the past few months and fire season is currently at its peak. Two wildfires in New Mexico (Blue 2 and Indios) have exceeded 3000 acres in size. Lighter winds are expected this month, with critically dry and warm conditions. High fire danger expected in June with fuels now primed for fire start. Monsoon onset will bring new lightning starts and will determine the end of the fire season.

Hydrologic Conditions and Impacts

Gila river basin streamflows running near normal, have decreased over past two months.

Rio Grande/Mimbres basin streamflows slightly below normal

Gila River Stages

Latest Flood Stage

Gila 0.89 ft 11.00 ft Redrock 4.17 ft 20.00 ft

Virden 4.46 ft 15.00 ft

Rio Grande Stages

Latest Flood Stage

El Paso 4.40 ft 8.50 ft

Gauge stage recorded on 6/3/2024

Image Caption: USGS 7 day average streamflow HUC map valid June 4, 2024

Agricultural Impacts

Image Captions:

Left: CPC Calculated Soil Moisture Ranking Percentile valid June 4, 2024 Right: Crop Moisture Index by Division. Weekly value for period ending June 1, 2024

Fire Hazard Impacts

Latest TX Burn Ban map available here

Latest NM Fire Restrictions available here

Image Caption: Significant Wildland Fire Potential Monthly Outlook for June 2024

Link to Wildfire Potential Outlooks from the National Interagency Coordination Center.

Seven Day Precipitation Forecast

Isolated showers and thunderstorms beginning this weekend, especially over the New Mexico forests.

Monsoon onset by end of month will determine drought status going forward. Drought conditions may rapidly intensify if rains are delayed.

Rapid Onset Drought Outlook

Links to the latest Climate Prediction Center 8 to 14 day Temperature Outlook and Precipitation Outlook.

High pressure over much of the U.S. Southwest next couple weeks. Above normal temperatures and minimal precipitation chances expected. Drought conditions are expected to persist into the summer season and the upcoming monsoon will greatly influence the next few outlooks.

Image Caption:

Days 8 to 14 U.S. Hazards Outlook Valid June 13 to June 19

Long-Range Outlooks

The latest monthly and seasonal outlooks can be found on the CPC homepage

Equal chances for precipitation across New Mexico and far west Texas (monthly average for El Paso: 0.73")

50-60% chance for above normal temperatures across south-central New Mexico and far west Texas. Heat waves likely.

Drought Outlook

The latest monthly and seasonal outlooks can be found on the CPC homepage

Drought conditions are expected to persist through June, with few changes. Upcoming monsoon will greatly influence the next few outlooks.

Links to the latest:

Climate Prediction Center Monthly Drought Outlook Climate Prediction Center Seasonal Drought Outlook