

# Drought Information Statement for Southeast Arizona Valid October 23, 2023 Issued By: NWS Tucson, AZ Contact Information: <u>w-twc.webmaster@noaa.gov</u>

- This product will be updated Nov. 20, 2023 or sooner if drought conditions change significantly.
- Please see all currently available products at <a href="https://drought.gov/drought-information-statements">https://drought.gov/drought-information-statements</a>.
- Please visit https://www.weather.gov/twc/DroughtInformationStatement for previous statements.





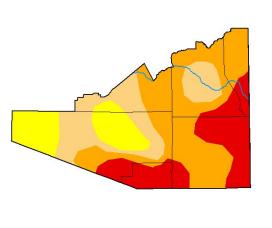
U.S. Drought Monitor

Link to the latest U.S. Drought Monitor for southeast Arizona

#### EXTREME DROUGHT CONDITIONS REMAIN ACROSS PORTIONS OF SOUTHEAST ARIZONA

- Drought intensity and Extent
  - D3 (Extreme Drought): Santa Cruz County, south central Pima, southwest and eastern Cochise, southeast Graham county and southern Greenlee county.
  - D2 (Severe Drought): Adjacent sections of southern and eastern Pima, Pinal and Graham counties, the remainder of Cochise and Greenlee counties.
  - D1 (Moderate Drought)/D0 Abnormally Dry: The rest of southeast Arizona not under D2 or D3.

#### U.S. Drought Monitor Tucson, AZ WFO



#### October 17, 2023 (Released Thursday, Oct. 19, 2023) Valid 8 a.m. EDT

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.01	99.99	84.62	62.26	23.14	0.00
Last Week 10-10-2023	0.01	99.99	84.62	62.26	23.14	0.00
3 Month s Ago 07-18-2023	61.84	38.16	0.00	0.00	0.00	0.00
Start of Calendar Year 01-03-2023	36.54	63.46	16.27	0.00	0.00	0.00
Start of Water Year 09-26-2023	0.01	99.99	84.66	54.83	23.11	0.00
One Year Ago 10-18-2022	0.00	100.00	32.94	9.61	0.00	0.00

None D2 Severe Drought D0 Abnormally Dry D3 Extreme Drought D1 Moderate Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author: Rocky Bilotta NCEI/NOAA

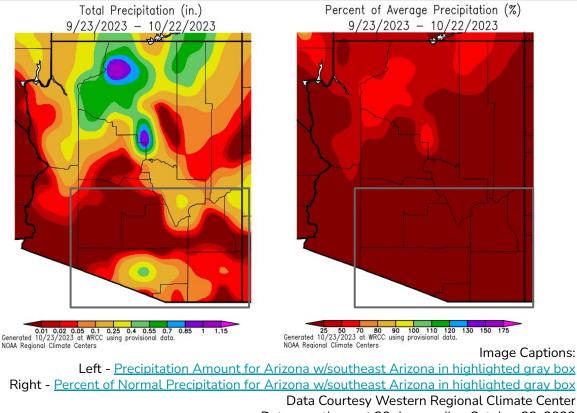


Image Caption: U.S. Drought Monitor valid 8am EDT October 17th.





Isolated areas of 0.25" to 0.50" during the past month with most areas recording less than a tenth (0.10") of an inch.



Data over the past 30 days ending October 22, 2023

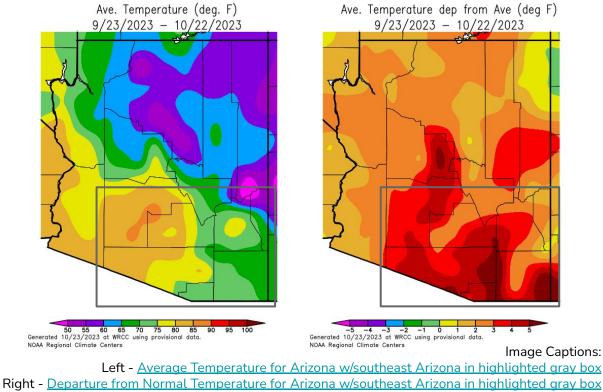
National Weather Service Tucson, AZ



National Oceanic and Atmospheric Administration



 Average temperatures over the past 30 days were 1° to 4° above normal for most of southeast Arizona.



Data Courtesy Western Regional Climate Center. Data over the past 30 days ending October 22, 2023





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

### Hydrologic Impacts

• Streamflow across much of the area continues to be below to much below normal for this time of year. The San Pedro River Basin and portions of the Upper Gila River Basin are at less than 10th percentile for this time of year.

#### Agricultural Impacts

• Soil moisture values are below the 5th percentile in most of southeast Arizona. Without additional rainfall, this could make some areas more susceptible to blowing dust.

#### Fire Hazard Impacts

• Record heat and below normal precipitation has resulted in fuel dryness levels that are much drier than normal. As a result, the threat of grass fires on windier days is higher than normal for this time of year until significant precipitation occurs.

#### **Mitigation Actions**

• Please refer to your municipality and/or water provider for mitigation information.



# Hydrologic Conditions and Impacts

 Streamflow across much of the area continues to be below to much below normal for this time of year. The San Pedro River Basin and portions of the Upper Gila River Basin are at less than 10th percentile for this time of year.

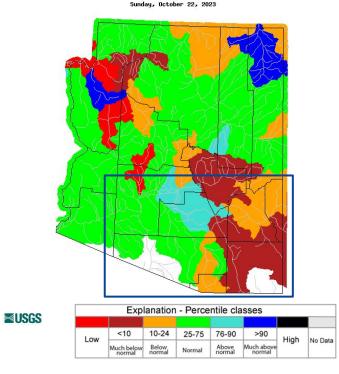


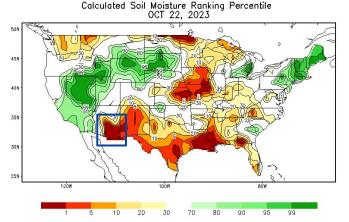
Image Caption: USGS 7 day average streamflow HUC map valid October 22, 2023





### Agricultural Impacts

• Soil moisture values are below the 5th percentile across southeast Arizona. This could make some areas more susceptible to blowing dust.



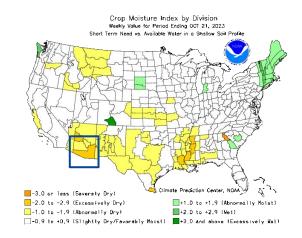


Image Captions:

Left: CPC Calculated <u>Soil Moisture Ranking</u> <u>Percentile</u> valid October 22, 2023 Right: <u>Crop Moisture Index by Division</u>. Weekly value for period ending October 21, 2023





A weather system moving in from the west will tap into some tropical moisture for a chance of much needed rain Monday night through Thursday, mainly from Tucson east and south.

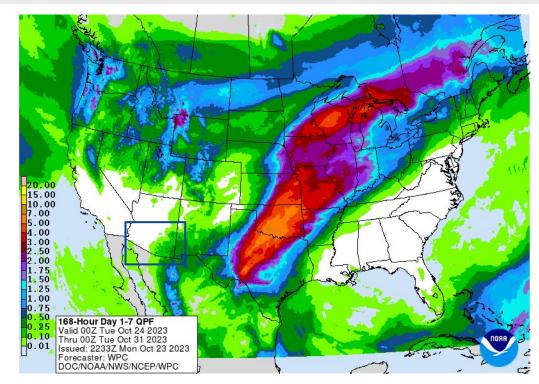


Image Caption: Weather Prediction Center 7-day precipitation forecast valid Monday October 23 to Monday October 30



Atmospheric Administration

Long-Range Outlooks

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

 The Climate Prediction Center outlook for November through January shows equal odds for either above, near or below normal seasonal mean temperatures and seasonal total precipitation for southeast Arizona

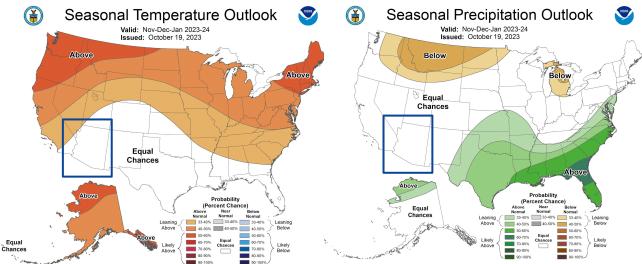


Image Captions:

Left - <u>Climate Prediction Center Seasonal Temperature Outlook.</u> Right - <u>Climate Prediction Center Seasonal Precipitation Outlook.</u> Valid November 2023 through January 2024



## **Drought Outlook**

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

• Drought conditions are likely to persist in early 2024.

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4). NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none). Author: Brad Pugh Drought persists NOAA/NWS/NCEP Climate Prediction Center Drought remains, but improves Drought removal likely **Drought development likely** No drought

Links to the latest: <u>Climate Prediction Center Monthly Drought Outlook</u> <u>Climate Prediction Center Seasonal Drought Outlook</u>



National Oceanic and Atmospheric Administration U.S. Department of Commerce Image Caption:

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Climate Prediction Center Seasonal Drought Outlook Released October 19, 2023 valid through January 31, 2024

https://go.usa.gov/3eZ73

Valid for October 19, 2023 - January 31, 2024

Released October 19, 2023