Tucson Weather Forecast
Office Drought Services

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Pima County LDIG Meeting
May 12, 2021
Drought Information Statement

- Issued when Drought Monitor indicates Extreme Drought D3 or greater in the Weather Forecast Office’s county forecast and warning area
- Provide current drought situation with pertinent hydrometeorological information and data to water managers, other agencies, and the media

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Drought Information Statement

National Weather Service Tucson Arizona
500 PM MST FRI APR 23 2021

...EXCEPTIONAL DROUGHT CONDITIONS CONTINUE ACROSS MOST OF SOUTHEAST ARIZONA...

.SYNOPSIS:

Drought intensity and extent: According to the latest U.S. Drought Monitor, exceptional drought (D4) conditions were across most of southeast Arizona. The exception was extreme drought (D3) conditions across south-central Pinal and parts of central Pima county and moderate (D1) to severe (D2) conditions across western Pima county.
Southeast Arizona Drought Page

https://www.weather.gov/twc/seazDM

Local Drought Information Statement (DGT) issued April 23
is issued once a month when portions of southeast Arizona are in Extreme (D3) or Exceptional (D4) drought.

U.S. Drought Monitor
http://droughtmonitor.unl.edu/

Long Term Drought Status
https://new.nwsfire.gov/drought
Local Drought Services Ideas

- Additional information or resources for the Drought Information Statement
- Additions to Southeast AZ Drought Page

New services
- Drought email briefing?
  - Similar to Monthly Fire Weather Outlook Briefings
  - Expand upon Drought Impact Statement
- Colorado River Shortage

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NWS Tucson Briefing - Monthly Fire Weather Outlook for May - July 2021

NWS Tucson - NOAA Service Account
to bcc: twc.operations

Good afternoon,

Not a lot of changes with the outlook this month as severe to exceptional drought continues.

Key Points:
- April - Above average in temps and below average in precip
- May – Expect above average temps and equal chances for precip with a slight lean toward drier than normal
- Severe to exceptional drought continues
- Increased chances of a more active monsoon remain
New Climate Normals 1991-2020

- Updated every 10 years in accordance with World Meteorological Organization
- Majority of Arizona warmer & drier
  - Tucson 1.2 degrees warmer and 0.98” drier annually, monsoon season 0.39” drier
  - Ajo annual precipitation 0.14” wetter
- [https://www.noaa.gov/explainers/understanding-climate-normals](https://www.noaa.gov/explainers/understanding-climate-normals)


- Climate change is clearly seen in comparing the new normals to the Twentieth Century averages
Monsoon Season Outlook

- June - October above normal precipitation for Arizona
- Climate Prediction Center Discussion: Below-normal soil moisture in the Southwest and southern Rockies may allow for more efficient heating of the land mass and potentially an enhanced monsoon circulation. Elevated probabilities for above-normal precipitation are predicted for parts of the southwest from JJA through ASO 2021, supported in part by dynamical model forecasts.
- Only 3 years since 2000 CPC outlook had above normal precipitation for monsoon season
  - 2001 - only 2.81” at Tucson Airport & 11th driest
  - 2006 - 10.60” at Tucson Airport & 6th wettest
  - 2015 - 6.63” at Tucson Airport & slightly above normal