

Tribal Water and Drought Resiliency

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Tribal Climate Resilience
Great Plains Tribal Water Alliance

Great Plains Tribal Water Alliance



- GPTWA is dedicated to the protection and preservation of Tribal water rights of the Missouri River in North Dakota, South Dakota, and Nebraska
- Provide Technical support on all water issues in the Great Plains
- 6 Member Tribes:
 - Standing Rock Sioux Tribe
 - Oglala Sioux Tribe
 - Rosebud Sioux Tribe
 - Flandreau Santee Sioux Tribe
 - Lower Brule Sioux Tribe
 - Cheyenne River Sioux Tribe



GPTWA Member Tribes Drought Plans

- Four member tribes of GPTWA created Drought Plans
 - Highlights drought vulnerabilities
 - Highlights future drought mitigation strategies
- Available on the GPTWA [website](http://www.tribalwateralliance.org)
 - www.tribalwateralliance.org

Drought Adaptation Plans



Oglala Sioux Tribe

June 2020 [drought adaptation plan](#) prepared by the Great Plains Tribal Water Alliance



Rosebud Sioux Tribe

October 2020 [drought adaptation plan](#) prepared by Great Plains Tribal Water Alliance



Standing Rock Sioux Tribe

June 2020 [drought adaptation plan](#) prepared by SRST in collaboration with Great Plains Tribal Water Alliance

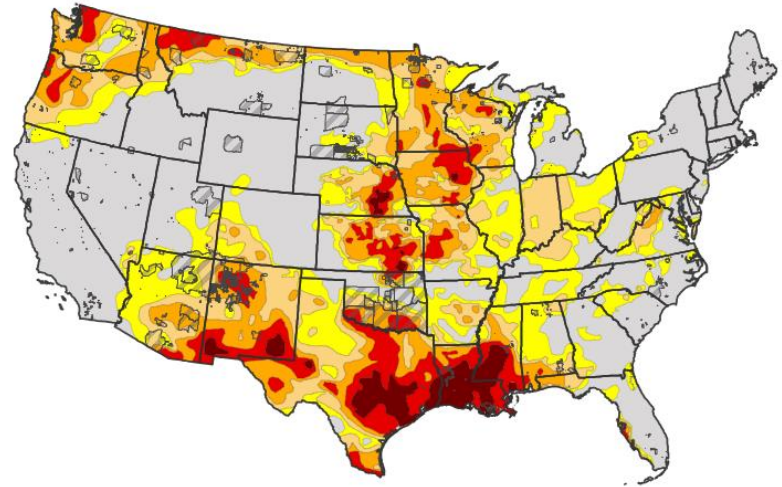


Flandreau Santee Sioux Tribe

June 2020 [drought adaptation plan](#) prepared by FSST in collaboration with Great Plains Tribal Water Alliance

Rising temperature are leading to increased demand for water

- In parts of north central region, this increase in temperature is expected to increase competition for water among communities, agriculture, energy production, and ecological needs.
- Warmer weather brings changes to crop growth cycles and alterations in timing and magnitude of rainfall events
 - As these trends continue, they require new agricultural management practices



U.S. Drought Monitor Category

	% of U.S.
D0 - Abnormally Dry	15.4%
D1 - Moderate Drought	13.3%
D2 - Severe Drought	10.3%
D3 - Extreme Drought	6.1%
D4 - Exceptional Drought	2.4%
Total Area in Drought (D1-D4)	32.1%

Tribal Nations

 Tribal Nation Boundaries

Source(s): NDMC, NOAA, USDA

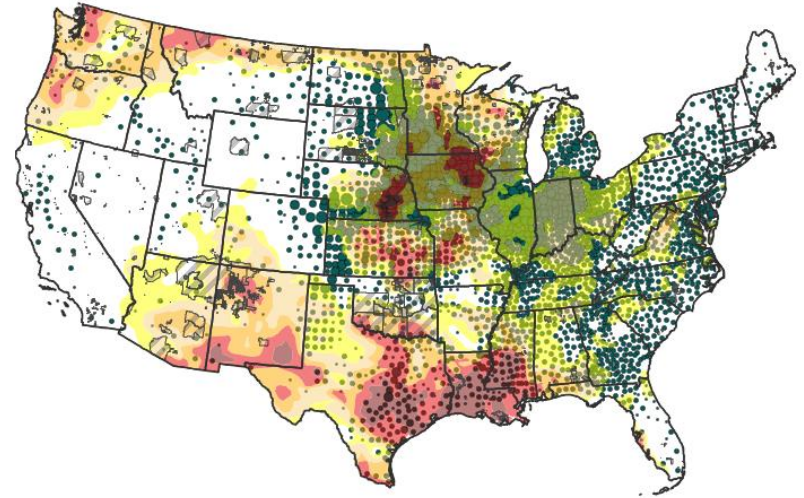
Updates Weekly: 09/26/23

Drought impacts on pesticide use

- Drought impacts on agriculture include poor or no crop growth, low yields, and increase of invasive species
- But in the absence of moisture, the desired effects of some pesticides are significantly reduced

<https://www.drought.gov/sectors/agriculture>

U.S. Crops and Livestock in Drought: Corn



Corn Produced by County

Scales by Acreage

U.S. Drought Monitor



Tribal Nations

Tribal Nation Boundaries

Source(s): USDA NASS, U.S. Drought Monitor
USDM Updates Weekly: 09/26/23

Drought.gov

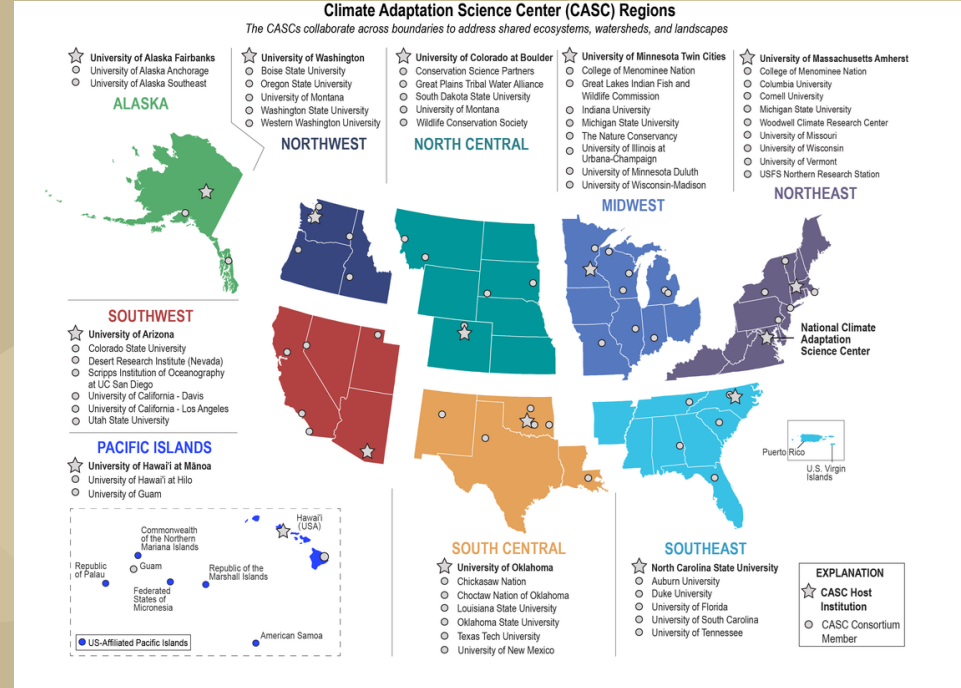
Mesonet Weather Station (South Dakota)

- Mesonet Weather Station on Pine Ridge Reservation to monitor drought information related to:
 - Agriculture
 - Water supplies



Tribal Climate Resilience Liaisons

- Liaisons work with tribal communities responding to climate change through:
 - Extension efforts to access data, information, and expertise
 - Facilitate research
 - Coordinate forums and information exchange



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SCAN ME

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