

Arizona Climate Summary

Summary of conditions for May 2024

May 2024 Summary

Much of Arizona experienced dry conditions this month, which is typical for this time of year. With a statewide average of 0.04 inches of precipitation, it ranked as the 12th driest May on record. For the water year to date (October-May), the state ranked as the 15th warmest on record. On May 1, 1.1 inches of snow was recorded in the Verde basin, and 2.4 inches of snow was measured in the Little Colorado basin. By the end of May, complete snowmelt occurred in most basins.

Conditions were warm and dry from May 1-4. On May 5, a low pressure system brought gusty winds, snow to Bright Angel (3.0 inches) and Grand Canyon Village (1.9 inches), and rain to Phantom Ranch (0.20 inches), Sunset Crater (0.13 inches), Flagstaff (0.01 inches), and Page (trace). A 73 mph wind gust was measured near Two Guns, and a 71 mph wind gust was recorded at Springerville Airport. Strong winds combined with low relative humidity in portions of eastern Apache County and southeastern Arizona prompted the National Weather Service in Flagstaff and Tucson to issue their first Red Flag Warnings of the year.

On May 7, a record low temperature of 44°F was set at Safford Airport, breaking the previous record of 46°F that was set on 5/7/2007.

On May 11, a low pressure system brought rain to Sunset Crater (0.06 inches), Page (0.05 inches), Bellemont (0.04 inches), and the Grand Canyon (0.01 inches). On May 13 and 14, portions of northern Arizona experienced light rain showers due to lingering moisture. A trace of precipitation was measured in Bellemont, the Grand Canyon, and Window Rock. A brief landspout tornado was also observed near Gray Mountain in Coconino County on the 13th.

From May 15-16, another low pressure system triggered rain showers in Bright Angel (0.38 inches), Williams (0.22 inches), Wupatki (0.12 inches), and Phoenix (0.01 inches). On the 15th, a strong thunderstorm affected portions of northern Coconino County along the Arizona/Utah border.

Warmer temperatures were prevalent across the state from May 17-19 due to a ridge of high pressure over the region.

On May 20, a storm system brought rain to Natural Bridge State Park and Window Rock (0.05 inches), Carefree and Fountain Hills (0.01 inches), and Phoenix (trace). A wind gust of 71 mph was recorded at Winslow Airport, and blowing dust was observed in portions of Pinal, Graham, Cochise, and Maricopa counties. Visibility fell to a half of a mile near Phoenix-Mesa Gateway Airport and Queen Creek, while near zero visibility occurred on the I-10 near Arizona City, resulting in a car crash with one injury.







Temperatures increased from May 27-29 due to a ridge of high pressure over the western United States. Tucson International Airport reached a high temperature of 100°F for the first time this year on May 27, which is around average. This was the second time since 1895 that Tucson reached their first 100°F high of the year on Memorial Day (the first time was on May 30, 1977).

The month concluded with zonal flow over the state. On May 31, Flagstaff Pulliam Airport reached 81°F, marking their first 80°F+ high temperature of the year. This is 6 days later than the climatological normal date of May 25.

Data are preliminary and are from NOAA/NCEI, the Northeast Regional Climate Center, the Southeast Regional Climate Center, and the National Weather Service Forecast Offices in Flagstaff, Phoenix, Tucson, and Las Vegas.

<u>Note</u>: Weather stations across the state have different reporting times. Official daily temperature and precipitation values are recorded at the airports from midnight to midnight, while statewide observations are taken at varying times throughout the day.

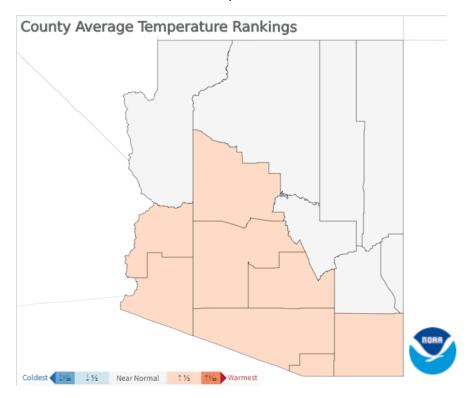
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$\underline{\textbf{Statewide Average, Maximum, Minimum Temperature and Total Precipitation, per County}$

May 2024

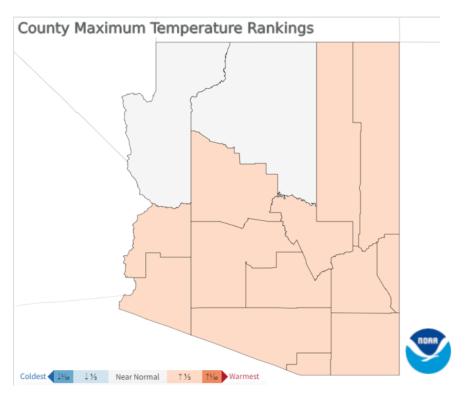


The average state temperature for May was 66.7°F, ranking as the 43rd warmest May within the period of record. The 1895-2024 mean average state temperature for May was 65.4°F, resulting in an anomaly of +1.3°F.

County	Average Temperature	Rank (130 Years)	Anomaly From the 1895-2024 mean
Apache	56.4°F	63 rd warmest	0.0°F
Cochise	67.8°F	40 th warmest	+1.2°F
Coconino	59.2°F	50 th warmest	+0.9°F
Gila	64.9°F	49 th warmest	+0.8°F
Graham	67.4°F	44 th warmest	+0.9°F
Greenlee	62.1°F	54 th warmest	+0.4°F
La Paz	78.6°F	31 st warmest	+2.3°F
Maricopa	77.0°F	36 th warmest	+2.0°F
Mohave	68.9°F	48 th warmest	+1.5°F
Navajo	59.0°F	47 th warmest	+1.0°F
Pima	73.5°F	42 nd warmest	+1.6°F
Pinal	75.5°F	37 th warmest	+1.7°F
Santa Cruz	66.7°F	32 nd warmest	+1.7°F
Yavapai	64.8°F	42 nd warmest	+1.4°F
Yuma	78.2°F	32 nd warmest	+2.1°F

Statewide Average, Maximum, Minimum Temperature and Total Precipitation, per County

May 2024

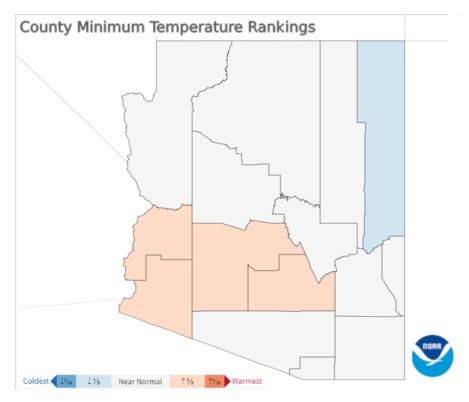


The average maximum state temperature for May was 83.1°F, ranking as the 38th warmest May within the period of record. The 1895-2024 mean maximum state temperature for May was 81.2°F, resulting in an anomaly of +1.9°F.

County	Maximum Temperature	Rank (130 Years)	Anomaly
			From the 1895-2024 mean
Apache	73.9°F	37 th warmest	+1.4°F
Cochise	85.5°F	33 rd warmest	+1.8°F
Coconino	75.6°F	44 th warmest	+1.6°F
Gila	81.7°F	37 th warmest	+1.9°F
Graham	83.7°F	34 th warmest	+1.8°F
Greenlee	78.9°F	38 th warmest	+1.6°F
La Paz	93.5°F	38 th warmest	+2.0°F
Maricopa	93.2°F	33 rd warmest	+2.3°F
Mohave	83.0°F	49 th warmest	+1.5°F
Navajo	76.3°F	35 th warmest	+2.0°F
Pima	90.7°F	32 nd warmest	+2.1°F
Pinal	91.6°F	43 rd warmest	+1.7°F
Santa Cruz	84.6°F	26 th warmest	+2.6°F
Yavapai	81.4°F	40 th warmest	+2.0°F
Yuma	95.0°F	24 th warmest	+2.6°F

Statewide Average, Maximum, Minimum Temperature and Total Precipitation, per County

May 2024

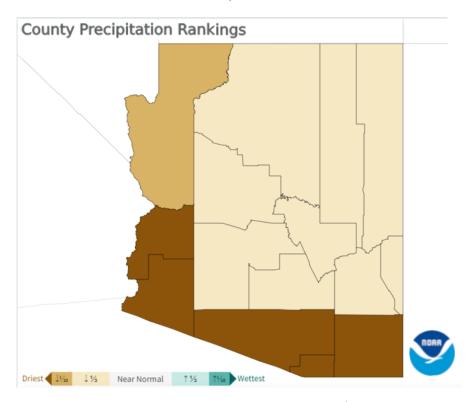


The average minimum state temperature for May was 50.2°F, ranking as the 57th warmest May within the period of record. The 1895-2024 mean minimum state temperature for May was 49.6°F, resulting in an anomaly of +0.6°F.

County	Minimum Temperature	Rank (130 Years)	Anomaly From the 1895-2024 mean
Apache	38.8°F	33 rd coldest	-1.4°F
Cochise	50.1°F	50 th warmest	+0.5°F
Coconino	42.9°F	61 st warmest	+0.4°F
Gila	48.1°F	63 rd coldest	-0.3°F
Graham	51.2°F	57 th warmest	+0.2°F
Greenlee	45.2°F	52 nd coldest	-0.8°F
La Paz	63.6°F	25 th warmest	+2.5°F
Maricopa	60.7°F	41 st warmest	+1.7°F
Mohave	54.8°F	45 th warmest	+1.5°F
Navajo	41.8°F	62 nd warmest	+0.1°F
Pima	56.2°F	50 th warmest	+1.0°F
Pinal	59.3°F	40 th warmest	+1.6°F
Santa Cruz	48.9°F	46 th warmest	+0.9°F
Yavapai	48.1°F	54 th warmest	+0.7°F
Yuma	61.3°F	40 th warmest	+1.4°F

Statewide Average, Maximum, Minimum Temperature and Total Precipitation, per County

May 2024



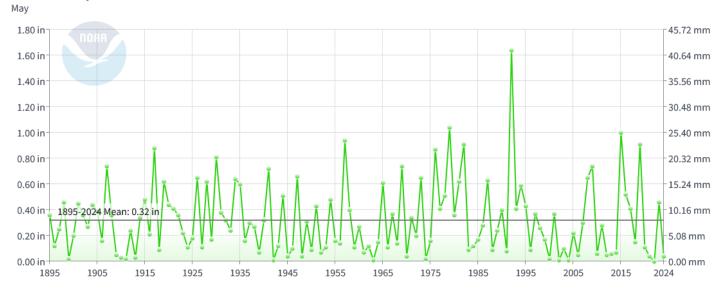
The average state precipitation for May was 0.04 inches, ranking as the 12th driest May within the period of record.

The 1895-2024 mean state precipitation for May was 0.32 inches, resulting in an anomaly of -0.28 inches.

County	Precipitation	Rank (130 Years)	Anomaly From the 1895-2024 mean
Apache	0.11"	28 th driest	-0.39''
Cochise	0.00''	Driest	-0.21"
Coconino	0.11"	25 th driest	-0.39"
Gila	0.07"	35 th driest	-0.39''
Graham	0.03"	25 th driest	-0.27"
Greenlee	0.08"	34 th driest	-0.32"
La Paz	0.00''	Driest	-0.07''
Maricopa	0.01"	32 nd driest	-0.11"
Mohave	0.02"	12 th driest	-0.30''
Navajo	0.05"	19 th driest	-0.38''
Pima	0.00''	Driest	-0.15"
Pinal	0.01"	25 th driest	-0.20''
Santa Cruz	0.00''	Driest	-0.22"
Yavapai	0.04"	29 th driest	-0.33"
Yuma	0.00''	Driest	-0.03"

May Statewide Precipitation (1895 to date)

Arizona Precipitation



Period of record: 1895-2024

This chart shows average Arizona precipitation each May through the period of record (1895 to present). May 2024 ranked as the 12th driest with an average of 0.04 inches, which is 0.28 inches below the 1895-2024 average of 0.32 inches.

Flagstaff Climate Statistics

May 2024

This ranked as the 47th warmest May on record (09/10/1898 to present). With 0.01 inches of precipitation, it ranked as the 12th driest May on record.

Heating Degree Days: 403 Normal: 424 Cooling Degree Days: 0 Normal: 1

Degree base 65°F

Avg Max Temp: 69.3°F Normal: 68.1°F Avg Min Temp: 34.2°F Normal: 34.6°F Avg Mean Temp: 51.8°F Normal: 51.3°F

0.01" **Total May Precipitation:** Normal May Precipitation: 0.77" Departure from Normal: -0.76" 0.01" on 5th Greatest 24-Hr Precip:

Highest Monthly Avg Temp: 56.8°F in 1984 Lowest Monthly Avg Temp: 44.6°F in 1917 Total Precipitation Year-to-Date: 9.64" Departure from Normal: +1.88" Total Precip Year-to-Date (Last Year): 17.45"

Highest Temp this month: 81°F on 31st Lowest Temp this month: 26°F on 6th

Total May Snowfall: 0.0"

Normal: 1.1"

Record May Snowfall: 15.0" in 1904

Record High: 89°F on 5/31/2002 Record Low: 7°F on 5/3/1915

> Greatest May Precipitation: 4.14" in 1992 Least May Precipitation: 0.00" in 2012

and 10 other years

No temperature or precipitation records this month.

Flagstaff Number of Days of:

Minimum Temp 32°F or lower 9 Minimum Temp 0°F or lower 0 Maximum Temp 90°F or higher 0 Maximum Temp 32°F or lower 0

Number of Days:

Clear 29 Partly Cloudy 2 Cloudy 0

Average Wind Speed: 7.9 mph

63 mph from 210° on 5th Highest Peak Gust:

Data are from NOAA, the Northeast Regional Climate Center, and the Southeast Regional Climate Center and are **preliminary**.

Normals on this page are from 1991-2020

MAY 2024 FLAGSTAFF AVERAGE DAILY TEMPERATURE							
ABOVE AVERAGE BELOW +/- 0.5°F							
S	М	т	W	Th	F	S	
			1	2	3	4	
5	6	7	8	9	10	11	
12	13	14	15	16	17	18	
19	20	21	22	23	24	25	
26	27	28	29	30	31		

This month, Flagstaff experienced 15 days of above average temperatures, 5 days of average temperatures, and 11 days of below average temperatures.

Phoenix Climate Statistics

May 2024

This ranked as the 13th warmest May on record (08/06/1895 to present). With 0.01 inches of precipitation, it ranked as the 57th wettest May on record.

Heating Degree Days: 0 Normal: 1 Cooling Degree Days: 591 Normal: 528

Degree base 65°F

Avg Max Temp: 96.7°F Normal: 94.5°F Avg Min Temp: 70.9°F Normal: 69.5°F Avg Mean Temp: 83.8°F Normal: 82.0°F

Total May Precipitation: 0.01"

Normal May Precipitation: 0.13"

Departure from Normal: -0.12"

Greatest 24-Hr Precip: 0.01" on 16th

Highest Monthly Avg Temp: 87.0°F in 1984 Lowest Monthly Avg Temp: 69.0°F in 1917 Total Precipitation Year-to-Date: 3.80"

Departure from Normal: +0.88"

Total Precip Year-to-Date (Last Year): 2.88"

Highest Temp this month: 107°F on 31st Lowest Temp this month: 61°F on 6th

Greatest May Precipitation: 1.31" in 1930 Least May Precipitation: 0.00" in 2023

and 64 other years

Record High: 114°F on 5/30/1910 Record Low: 39°F on 5/3/1899

Number of Days:
Clear 26
Partly Cloudy 5
Cloudy 0

No temperature or precipitation records this month.

Phoenix Number of Days of:

Minimum Temp 32°F or lower 0
Minimum Temp 0°F or lower 0
Maximum Temp 90°F or higher 28
Maximum Temp 32°F or lower 0

Average Wind Speed: 7.6 mph

Highest Peak Gust: 47 mph from 270° on 20th

Data are from NOAA, the Northeast Regional Climate Center, and the Southeast Regional Climate Center and are **preliminary**.

Normals on this page are from 1991-2020

Γ	MAY 2024 PHOENIX AVERAGE DAILY TEMPERATURE							٦
	ABOVE AVERAGE BELOW +/- 0.5°F							
	S	М	Т	W	Th	F	S	
				1	2	3	4	
	5	6	7	8	9	10	11	
	12	13	14	15	16	17	18	te
	19	20	21	22	23	24	25	Clima
	26	27	28	29	30	31		ZStateClimate
*Data are	from the Natio	nal Weather Se	ervice office in F	Phoenix and are	preliminary.			@AZ

Phoenix recorded 18 days of above average temperatures, 2 days of average temperatures, and 11 days of below average temperatures this month.

Tucson Climate Statistics

May 2024

This ranked as the 24 th warmest May on record (09/01/1894 to present). With 0.00 inches of precipitation, it tied as the driest May on record.	Heating Degree Days: 0 Normal: 4 Cooling Degree Days: 388 Normal: 370 Degree base 65°F
Avg Max Temp: 93.1°F Normal: 91.8°F	Total May Precipitation: 0.00" Normal May Precipitation: 0.20"
Avg Min Temp: 61.3°F Normal: 61.8°F Avg Mean Temp: 77.2°F Normal: 76.8°F	Departure from Normal: -0.20"
Highest Monthly Avg Temp: 80.7°F in 2020 Lowest Monthly Avg Temp: 64.6°F in 1905	Total Precipitation Year-to-Date: 5.29" Departure from Normal: +2.61" Total Precip Year-to-Date (Last Year): 3.54"
Highest Temp this month: 103°F on 28 th Lowest Temp this month: 53°F on 7 th	Greatest May Precipitation: 1.34" in 1931 Least May Precipitation: 0.00" in 2024 and 52 other years
Record High: 111°F on 5/29/1910 Record Low: 32°F on 5/3/1899	Number of Days: Clear 29 Partly Cloudy 0 Cloudy 2
No temperature or precipitation records this month.	·
Tucson Number of Days of: Minimum Temp 32°F or lower 0 Minimum Temp 0°F or lower 0	Average Wind Speed: 7.0 mph Highest Peak Gust: 40 mph from 200° on 5 th 40 mph from 250° on 8 th
Maximum Temp 90°F or higher 22 Maximum Temp 32°F or lower 0	Data are from NOAA, the Northeast Regional Climate Center, and the Southeast Regional Climate Center and are preliminary.

Normals on this page are from 1991-2020

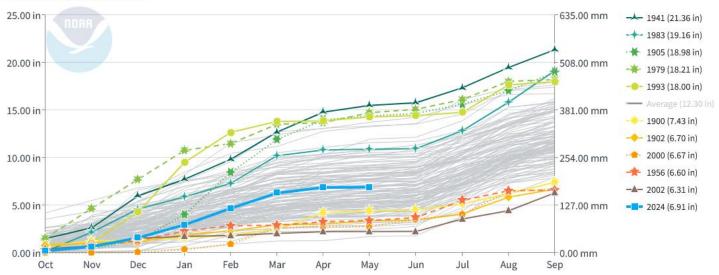
MAY 2024 TUCSON AVERAGE DAILY TEMPERATURE							
ABOVE AVERAGE BELOW +/- 0.5°F							
S	М	Т	W	Th	F	S	
			1	2	3	4	
5	6	7	8	9	10	11	
12	13	14	15	16	17	18	
19	20	21	22	23	24	25	
26	27	28	29	30	31		
e from the Natio	nal Weather Se	ervice office in 1	Fucson and are	preliminary.			

This month, Tucson observed 16 days of above average temperatures, 3 days of average temperatures, and 12 days of below average temperatures.

Cumulative Statewide Precipitation per Water Year (Oct 2023-Sept 2024)

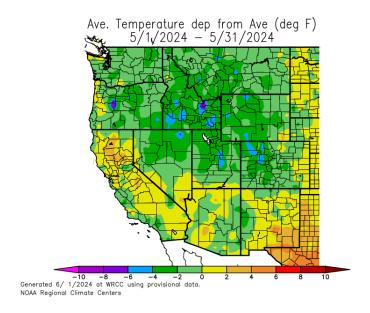
Arizona

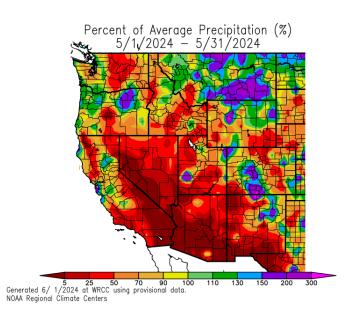
October-September Precipitation

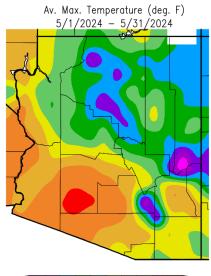


The average state cumulative Water Year precipitation was 6.91 inches at the end of May, which is 0.06 inches below the October-May average of 6.97 inches.

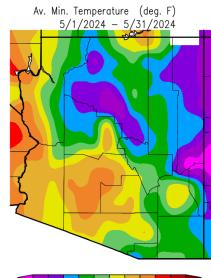
Data are from the National Centers for Environmental Information and are preliminary.







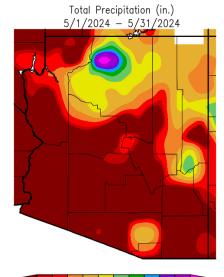




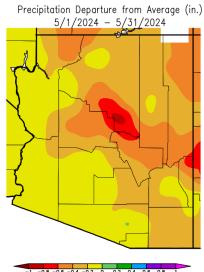
30 35 40 45 50 55 60 65 70

Generated 6/ 1/2024 at WRCC using provisional data.

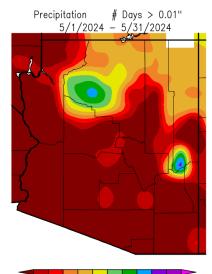
NOAA Regional Climate Centers



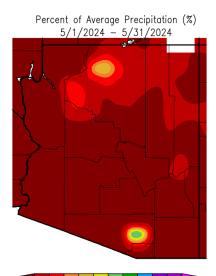
0.01 0.02 0.05 0.1 0.175 0.25 0.325 0.4 0.475 0.55 0.625 Generated 6/ 1/2024 at WRCC using provisional data. NOAA Regional Climate Centers



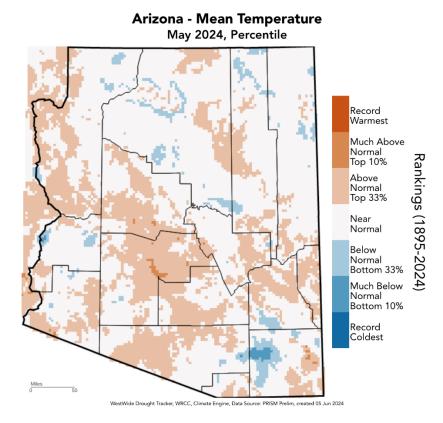
Generated 6/ 1/2024 at WRCC using provisional data.



0,5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5 Generated 6/ 1/2024 at WRCC using provisional data. NOAA Regional Climate Centers

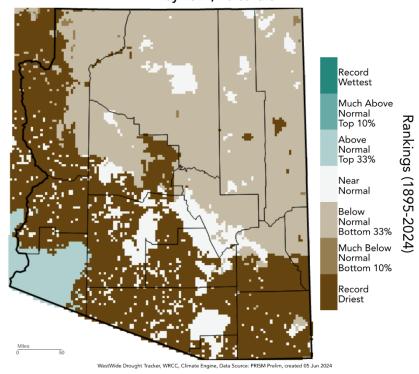


25 50 70 80 90 100 110 120 130 150 175 Generated 6/ 1/2024 at WRCC using provisional data. NOAA Regional Climate Centers

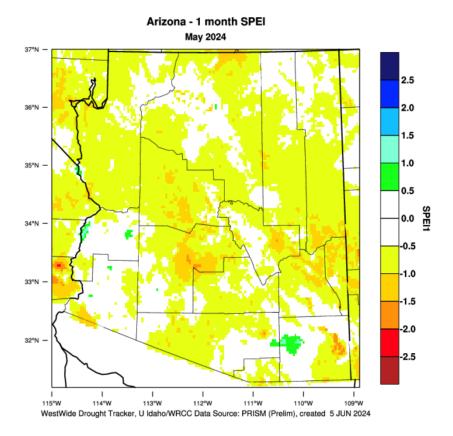


Much of the state recorded near normal to above normal temperatures, with portions of Coconino, Navajo, Apache, and Cochise counties measuring below normal temperatures.

Arizona - Precipitation May 2024, Percentile

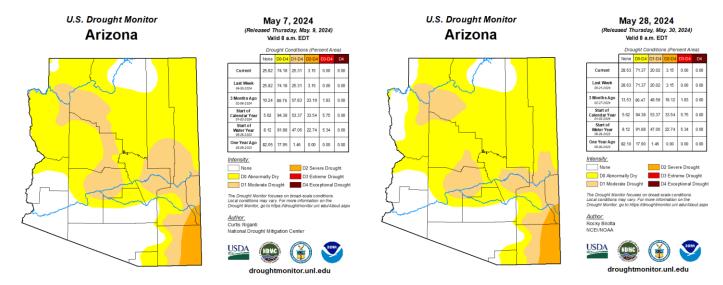


Precipitation was below normal across much of the state.



This map shows the standardized precipitation evapotranspiration index (SPEI) across Arizona. May precipitation and evapotranspiration totals are measured across the state and are compared to previous May precipitation and evapotranspiration totals through the period of record (1895-present). Positive values represent wet conditions, while negative values represent dry conditions.

Short-term Drought



While May was very dry across the state, wet conditions from April continued to assist short-term drought. Extreme (D3) short-term drought was completely removed, with 17% of the state remaining with Moderate (D1) short-term drought and 3% of the state in Severe (D2) short-term drought. Eighty percent of the state ended May without drought or Abnormally Dry (D0).