



Drought Information Statement for south central and southeast Colorado

Current Status, Impacts, and Outlook [Beta Test 2023]

Issued By: NWS Pueblo, Colorado

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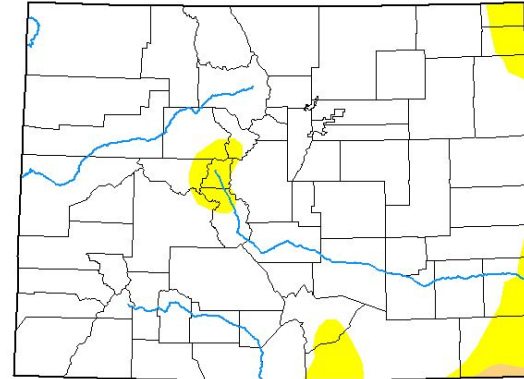


U.S. Drought Monitor

Latest U.S. Drought Monitor Map

- Drought intensity and Extent
 - **D4 Exceptional Drought:** None
 - **D3 Extreme Drought:** None
 - **D2 Severe Drought:** None
 - **D1 Moderate Drought:** Extreme south central and southeast Baca county.
 - **D0: Abnormally Dry:** South central Huerfano county, western and extreme southeast Las Animas county, southwestern into northeastern Baca county, eastern Prowers county into southeastern Kiowa county, as well as Lake county into northern Chaffee county.
 - The rest of south central and southeast Colorado are deemed drought free.

U.S. Drought Monitor Colorado



June 13, 2023

(Released Thursday, Jun. 15, 2023)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	92.94	7.06	0.42	0.00	0.00	0.00
Last Week 06-06-2023	83.43	16.57	1.07	0.24	0.00	0.00
3 Months Ago 03-14-2023	46.03	53.97	36.48	9.05	2.00	0.16
Start of Calendar Year 01-03-2023	39.97	60.03	33.83	12.28	1.91	0.01
Start of Water Year 09-27-2022	15.46	84.54	45.65	15.47	3.73	0.57
One Year Ago 06-14-2022	1.09	98.91	81.75	42.97	15.89	0.23

Intensity

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional 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>

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NOAA/NWS/NCEP/CPC



droughtmonitor.unl.edu

Image Caption: U.S. Drought Monitor valid 7am MDT June 13th.



National Oceanic and Atmospheric Administration
U.S. Department of Commerce

Major improvements in drought conditions across southeast Colorado

National Weather Service
Pueblo, Colorado



Recent Change in Drought Intensity

- Eight Week Drought Monitor Class Change.
 - Drought Improved: Most of south central and southeast Colorado.
 - Drought Worsened: Abnormally Dry (D0) conditions expanded across portions of Lake county.

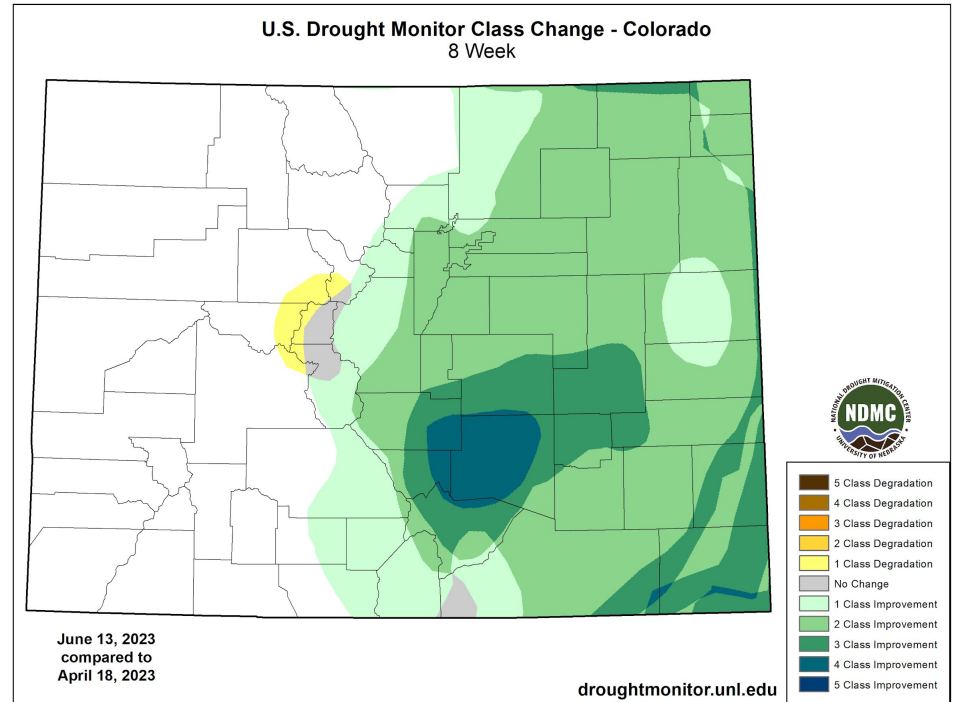
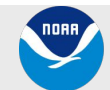


Image Caption: U.S. Drought Monitor 8-week change map valid 7am MDT June 13th, 2023.



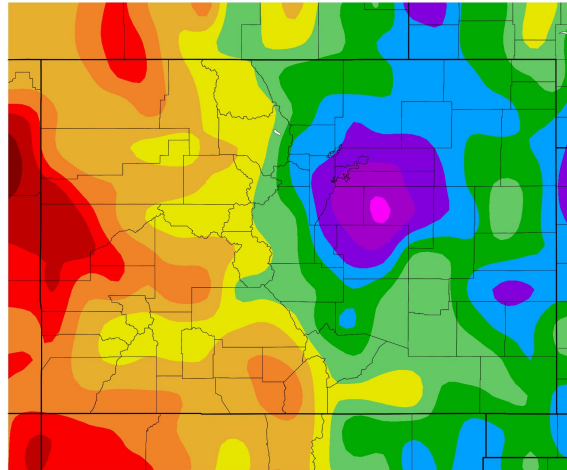


Precipitation

Main Takeaways

- Widespread abundant precipitation has been recorded across the SE Mts into the I-25 Corridor and SE Plains, from the end of April through June to date. These areas have seen 4 to 9 inches of precipitation over the past 60 days, with local areas of 10 to 12 inches of rain!
- Near to slightly below normal precipitation has been recorded across the SW Mts into western portions of the San Luis Valley over the past 60 days. However, snowpack across the SW Mts remains above normal.

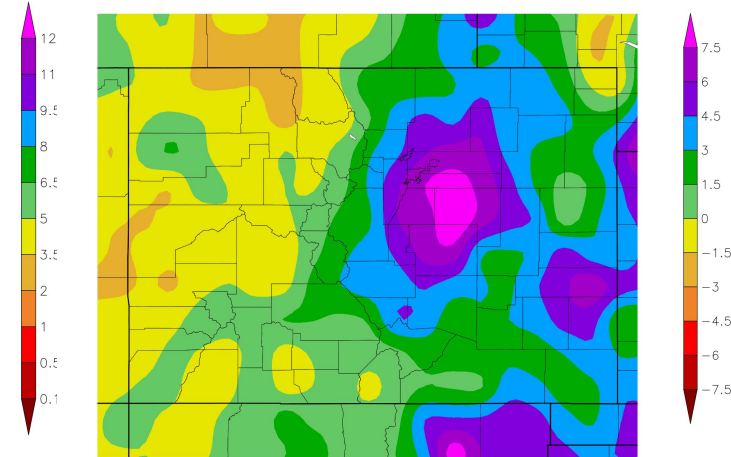
Precipitation (in)
4/20/2023 - 6/18/2023



Generated 6/19/2023 at HPRCC using provisional data.

NOAA Regional Climate Center

Departure from Normal Precipitation (in)
4/20/2023 - 6/18/2023



Generated 6/19/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

Image Captions:
 Left - Precipitation Amount for CO
 Right - Departure from Normal Precipitation for CO
 Data Courtesy High Plains Regional Climate Center.
 Data over the past 60 days ending June 18th, 2023



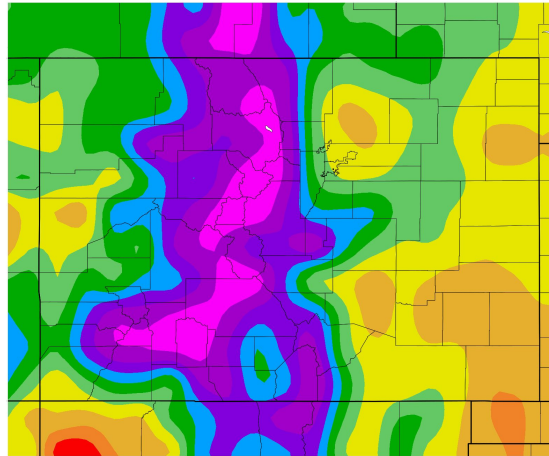


Temperature

Main Takeaways

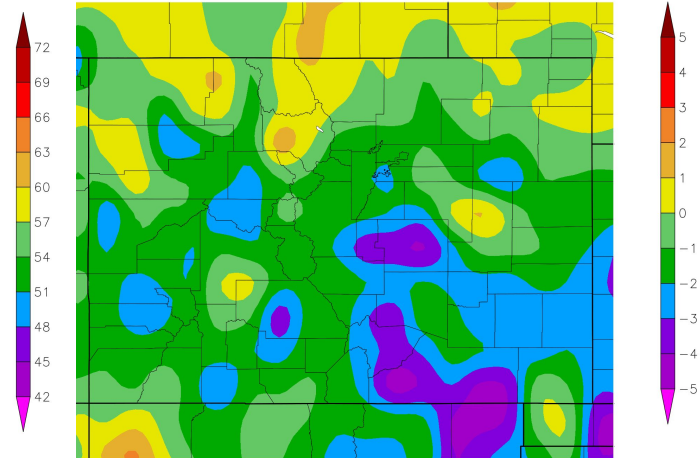
- Average temperatures across south central and southeast Colorado have been generally below normal values over the past 60 days.

Temperature (F)
4/20/2023 – 6/18/2023



Generated 6/19/2023 at HPRCC using provisional data.

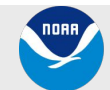
Departure from Normal Temperature (F)
4/20/2023 – 6/18/2023



NOAA Regional Climate Centers 2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

Image Captions:
Left - Average Temperature
Right - Departure from Normal Temperature
Data Courtesy High Plains Regional Climate Center.
Data over the past 60 days ending June 18th, 2023





Summary of Impacts

Hydrologic Impacts

- Abundant precipitation and above median snowpack has led to high and fast flows in streams and rivers across south central and southeast Colorado.
- Increased flash flooding across south central and southeast Colorado with minor flooding, at times along main stem rivers.

Agricultural Impacts

- Please see the latest [Colorado Crop Progress Report](#) from the USDA.

Fire Hazard Impacts

- Abundant moisture and warmer temperatures has allowed for green up across south central and southeast Colorado, leading to decreased fire danger throughout the month of May and June.

Mitigation actions

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





Hydrologic Conditions

Mountain Precipitation

Main Takeaways

- Statewide mountain precipitation for the month of May was 90 percent of median, as compared to 108 percent of median at this same time last year. This brings the 2023 Water Year (Oct 22-Sept 23) to date precipitation to 110 percent of median, as compared to 93 percent of median at this same time last year.
- In the Arkansas basin, May precipitation came in at 143 percent of median, as compared to 134 percent of median at this same time last year. This brings the 2023 Water Year to date precipitation to 95 percent of median, as compared to 93 percent of median at this same time last year.
- In the Rio Grande basin, May precipitation came in in at 150 percent of median, as compared to 78 percent of median at this same time last year. This brings the 2023 Water Year to date precipitation to 106 percent of median, as compared to 81 percent of median at this same time last year.

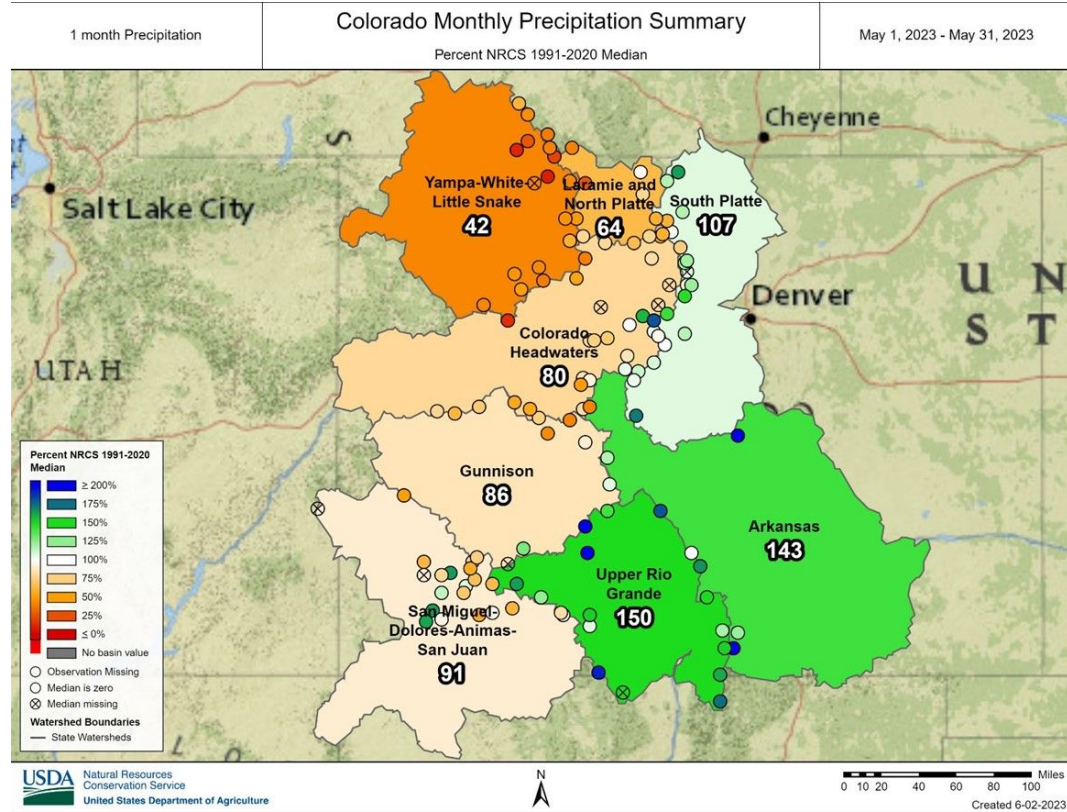
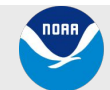


Image Caption: CO NRCS SNOTEL Precipitation valid May 1-31, 2023





Hydrologic Conditions

Mountain Snowpack

Main Takeaways

- Statewide mountain snowpack on June 1st was at 136 percent of median, as compared to 71 percent of median at this same time last year..
- In the Arkansas basin, June 1st snowpack was at 100 percent of median, as compared to 100 percent of median at this same time last year.
- In the Rio Grande basin, June 1st snowpack was at 108 percent of median, as compared to 0 percent of median (melted out) at this same time last year.

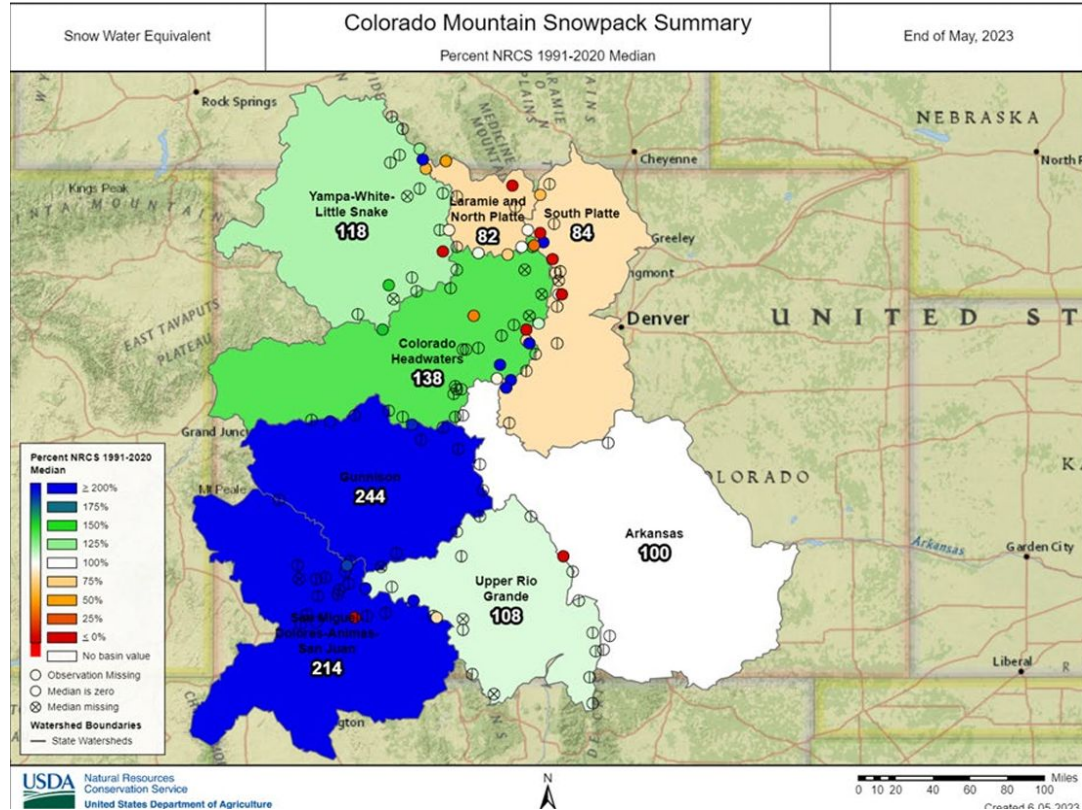


Image Caption: CO NRCS SNOTEL SWE valid at the end of May 2023.





Hydrologic Conditions

Streamflow

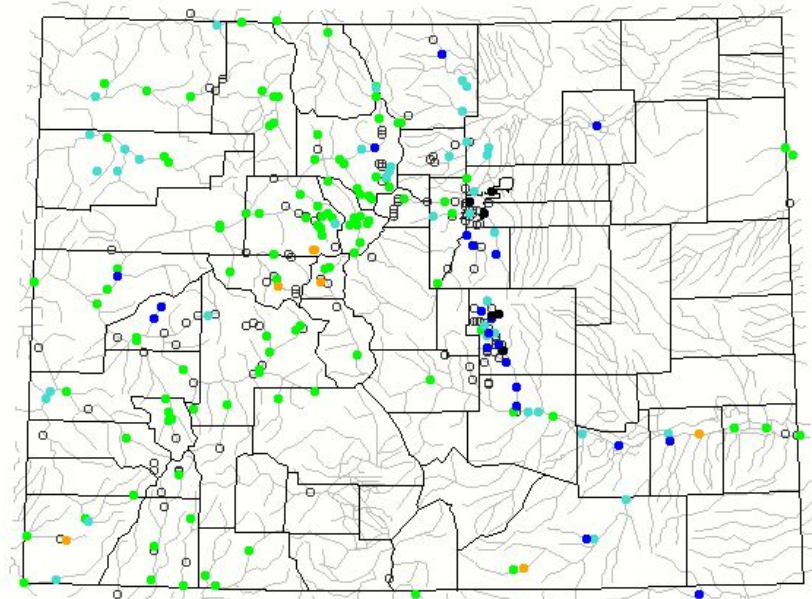
Main Takeaways

- Current stream flows are at or above normal across south central and southeast Colorado.
- Stream flow forecasts across the Arkansas basin range from 69% of median at Grape Creek near Westcliffe to 108% of median at Chalk Creek near Natrop.
- Stream flow forecasts in the Rio Grande basin range from 82% of median at Culebra Creek at San Luis to 156% of median at San Antonio River at Ortiz.

Impacts

- Abundant precipitation and above median snowpack has led to high and fast flows in streams and rivers across south central and southeast Colorado.
- Increased flash flooding across south central and southeast Colorado with minor flooding, at times, along main stem rivers.

Sunday, June 18, 2023



GS

Explanation - Percentile classes							
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	No Data

Image Caption: USGS 7 day average streamflow for Colorado ending June 18th, 2023





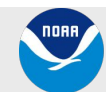
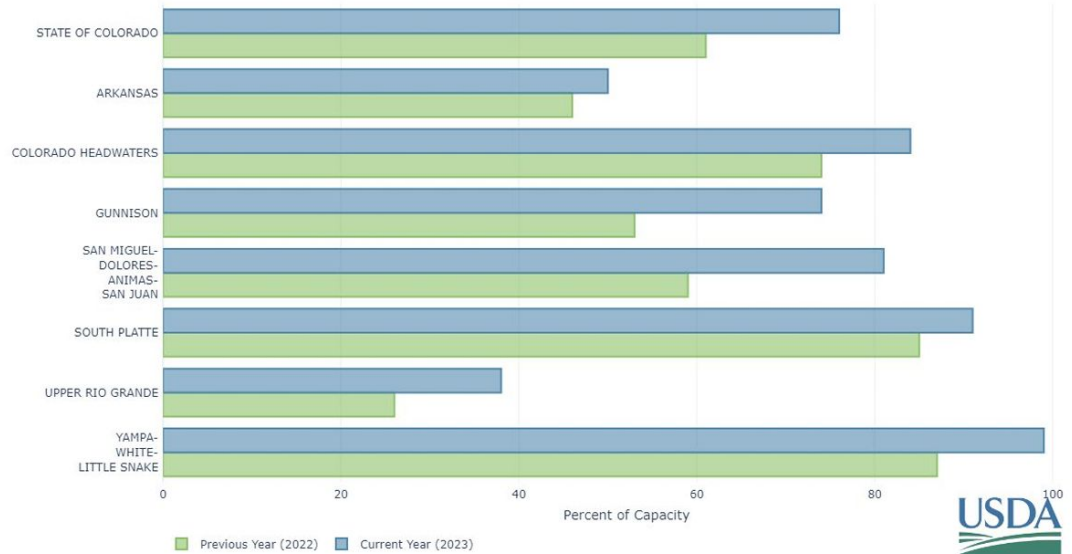
Hydrologic Conditions

Reservoir Storage

Main Takeaways

- Statewide water storage at the end of May was at 100 percent of median overall, as compared to 85 percent of median storage available at this same time last year.
- In the Arkansas basin, water storage at the end of May was at 98 percent of median overall, as compared to 92 percent of median storage available at this same time last year.
- In the Rio Grande basin, water storage at the end of May was at 124 percent of median overall, as compared to 83 percent of median storage available at this same time last year.

RESERVOIR STORAGE IN COLORADO
END OF MAY 2023





Agricultural Impacts

Main Takeaways

- Soil moisture conditions have improved to at and above normal across all south central and southeast Colorado.
- Please see the latest [Colorado Crop Progress Report](#) from the USDA

Calculated Soil Moisture Ranking Percentile
JUN 17, 2023

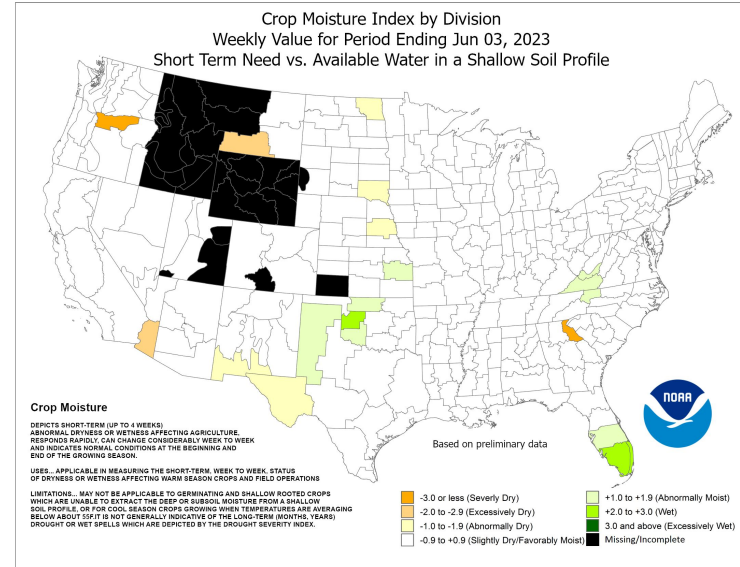
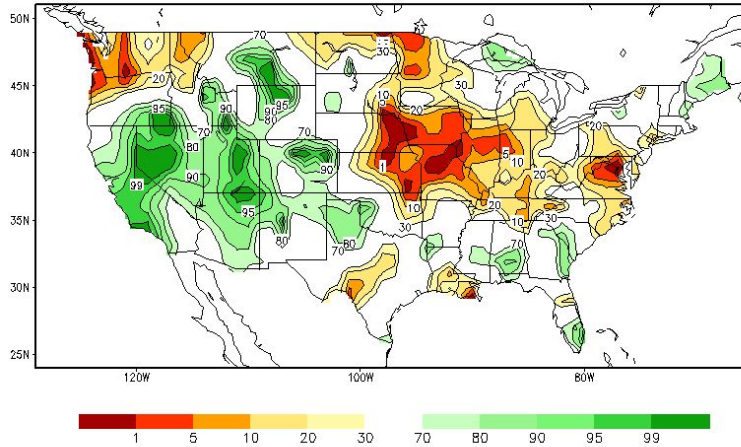


Image Captions:

Left: CPC Calculated [Soil Moisture Ranking Percentile](#) valid June 17th, 2023

Right: [Crop Moisture Index by Division](#). Weekly value for period ending June 3rd, 2023





Fire Hazard Impacts

Main Takeaways

- Abundant moisture and warmer temperatures has allowed for green up across south central and southeast Colorado.
- Abundant precipitation and continued high mountain snowpack has led to decreased fire danger throughout the month of May and June.

Latest information on fire bans and restrictions across the area can be found at:

www.coemergency.com/p/fire-bans-danger.html

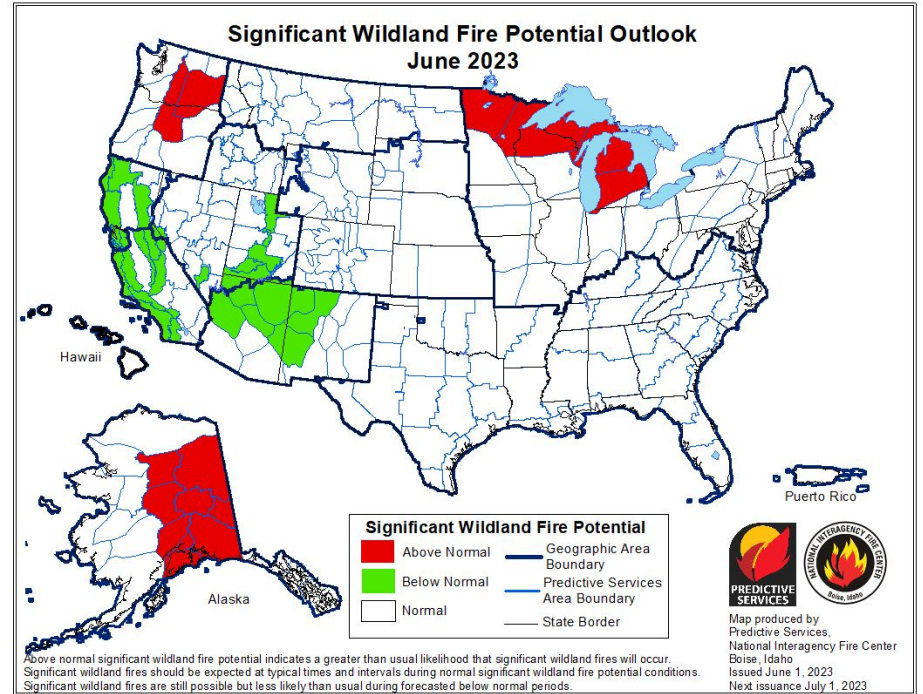


Image Caption: [Significant Wildland Fire Potential Monthly Outlook](#) for June 2023





6-10 Day Outlook

Temperature and Precipitation Outlook

Main Takeaways

- Temperatures leaning to above normal across south central and southeast Colorado.
- Precipitation leaning to below normal across south central and southeast Colorado.

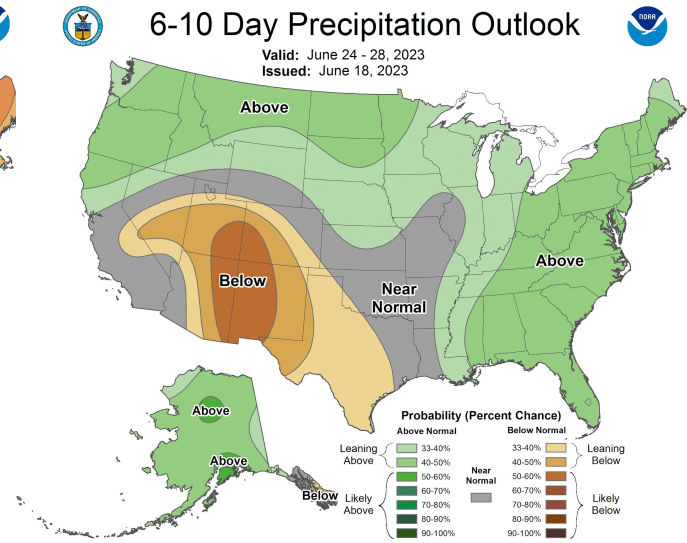
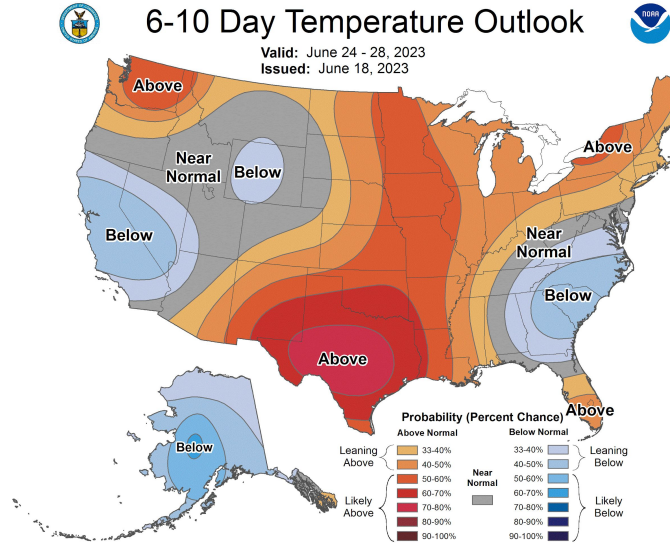


Image Captions:
 Left - [Climate Prediction Center 6-10 Day Temperature Outlook](#),
 Right - [Climate Prediction Center 6-10 Day Precipitation Outlook](#),
 Valid June 1-5, 2023





Monthly Outlooks

Monthly Temperature and Precipitation Outlook

Main Takeaways

- CPC temperature outlook indicates better chances of above normal temperatures across south central and southeast Colorado for the month of July.
- CPC precipitation outlook indicates equal chances of above, below and near normal precipitation across south central and southeast Colorado for the month of July.

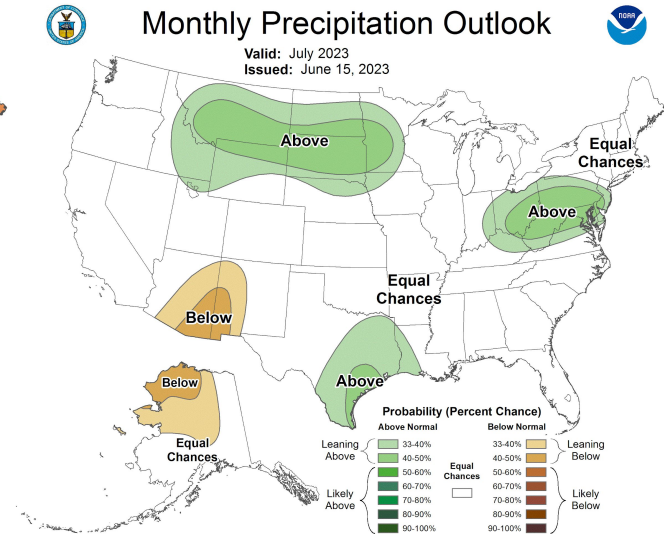
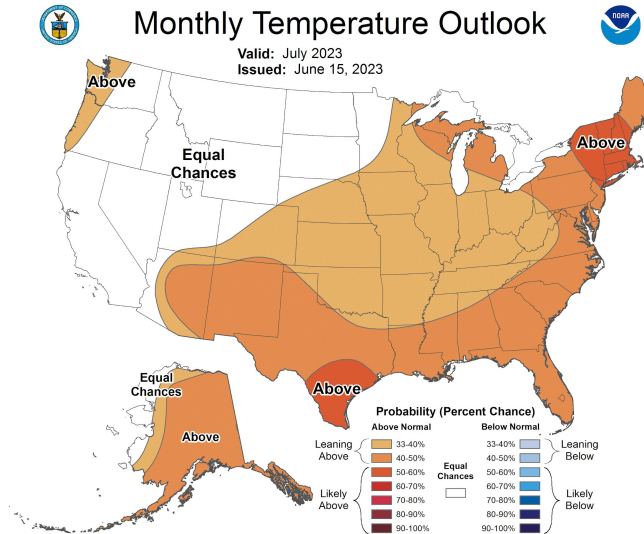
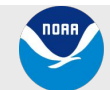


Image Captions:

Left - [Climate Prediction Center Monthly Temperature Outlook](#).

Right - [Climate Prediction Center Monthly Precipitation Outlook](#).

Valid June 2023





Seasonal Climate Outlook

Seasonal Temperature and Precipitation Outlook

Main Takeaways

- The CPC 3 month (July, August and September) temperature outlook leans to above normal across south central and southeast Colorado.
- The CPC 3 month (July, August and September) precipitation outlook indicates equal chances of above, below and near normal across south central and southeast Colorado.

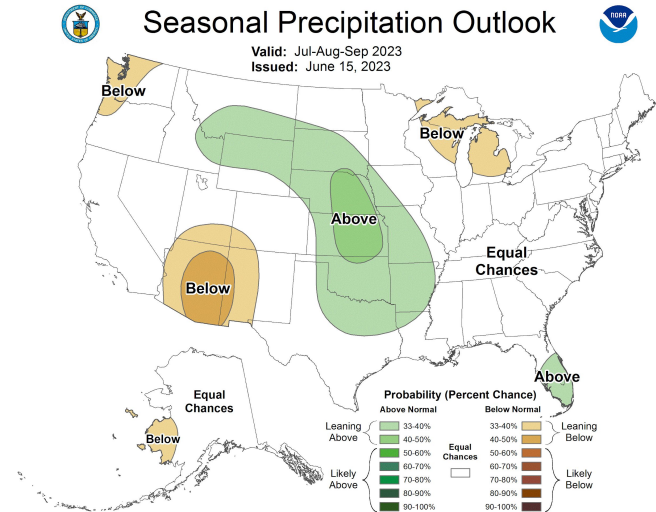
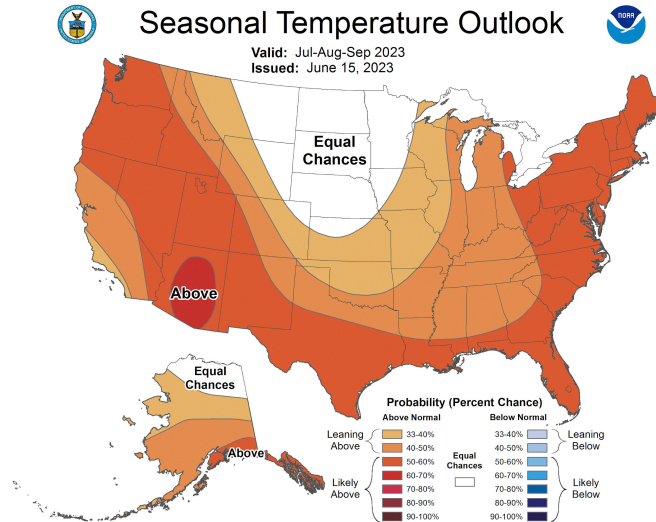
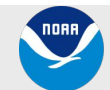


Image Captions:

Left - [Climate Prediction Center Seasonal Temperature Outlook](#).

Right - [Climate Prediction Center Seasonal Precipitation Outlook](#).

Valid July to September 2023





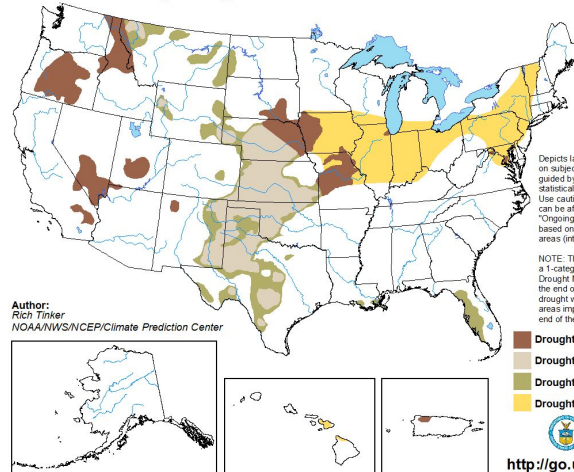
Drought Outlook

Main Takeaways

- The June drought outlook indicated improvements in the drought conditions across southeast Colorado.
- The seasonal drought outlook continues to indicate removal of drought conditions across southeast Colorado.

U.S. Monthly Drought Outlook Drought Tendency During the Valid Period

Valid for June 2023
Released May 31, 2023



U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

Valid for June 15 - September 30, 2023
Released June 15

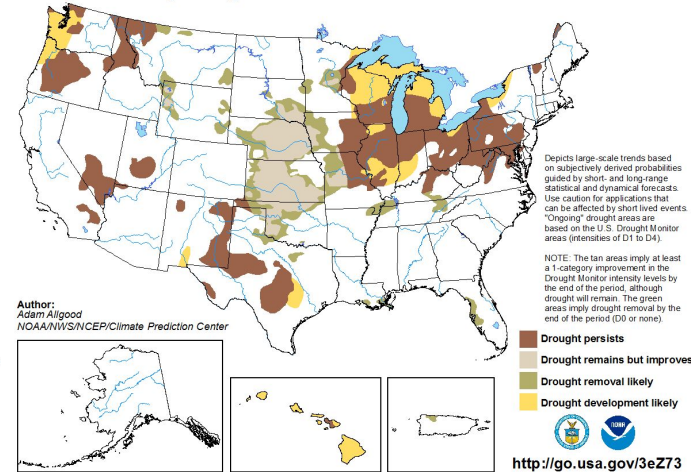


Image Captions:

Left - [Climate Prediction Center Monthly Drought Outlook](#) Released May 31st, 2023 valid for June of 2023.

Right - [Climate Prediction Center Seasonal Drought Outlook](#) Released June 15th, 2023 valid for June 15th through September 30th, 2023.

