

2022 Water Supply Update

Water & Sewer Board
November 16th, 2022



Water Rental Summary

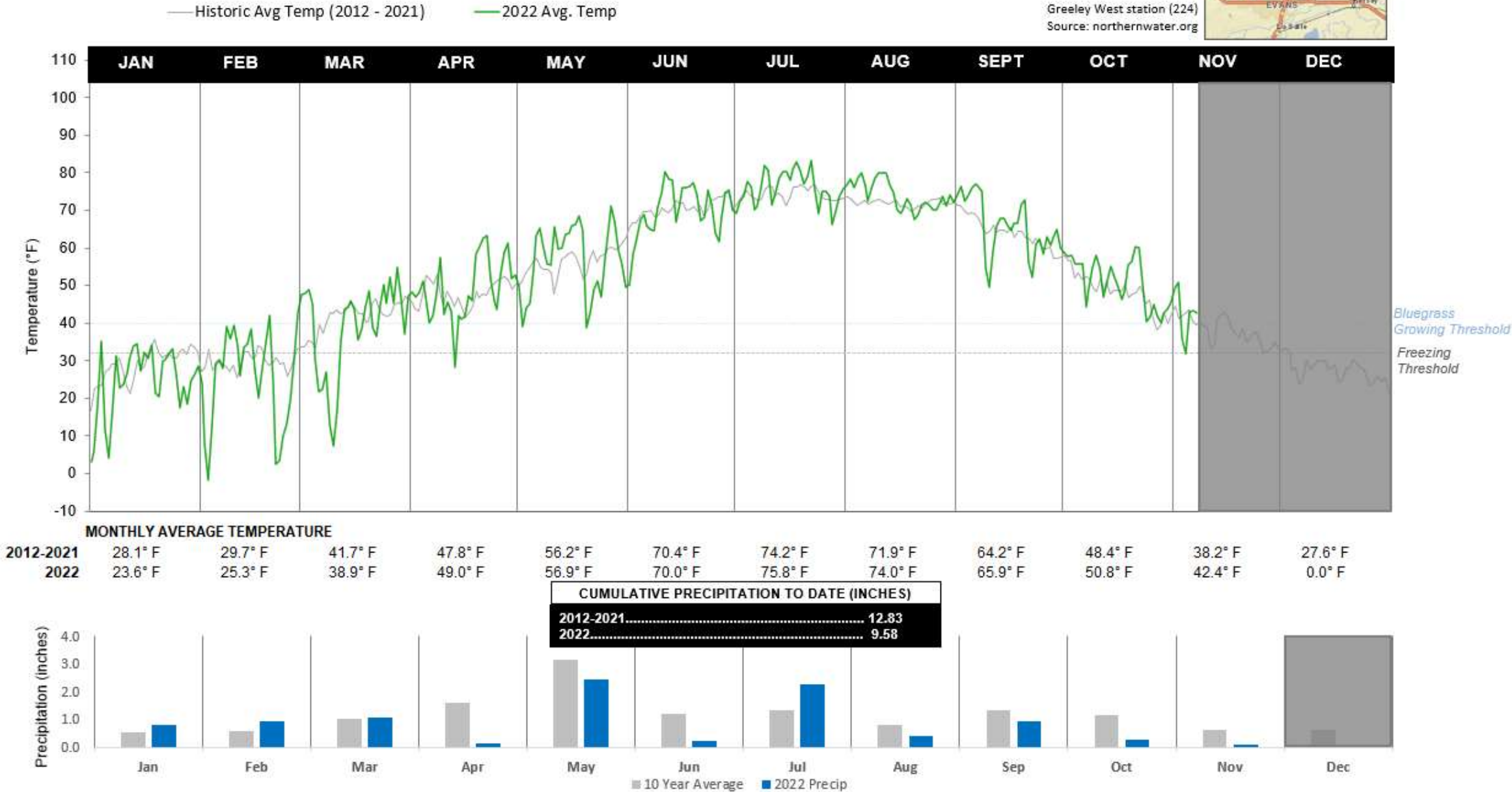
• C-BT	8,483	AF
• GLIC changed	326	AF
• GLIC unchanged	1,881	AF
• WSSC	517	AF
• NPIC	207	AF
• HMR	775	AF
• Leasebacks		
◦ WSSC	1,808	AF
◦ GLIC	2,637	AF
◦ L&W	2,874	AF
◦ New Cache	813	AF
<hr/>		
Total	20,321	AF



City of Greeley: Temperature (°F) and Precipitation 2012-2022



Greeley West station (224)
Source: northernwater.org



2022 Weather

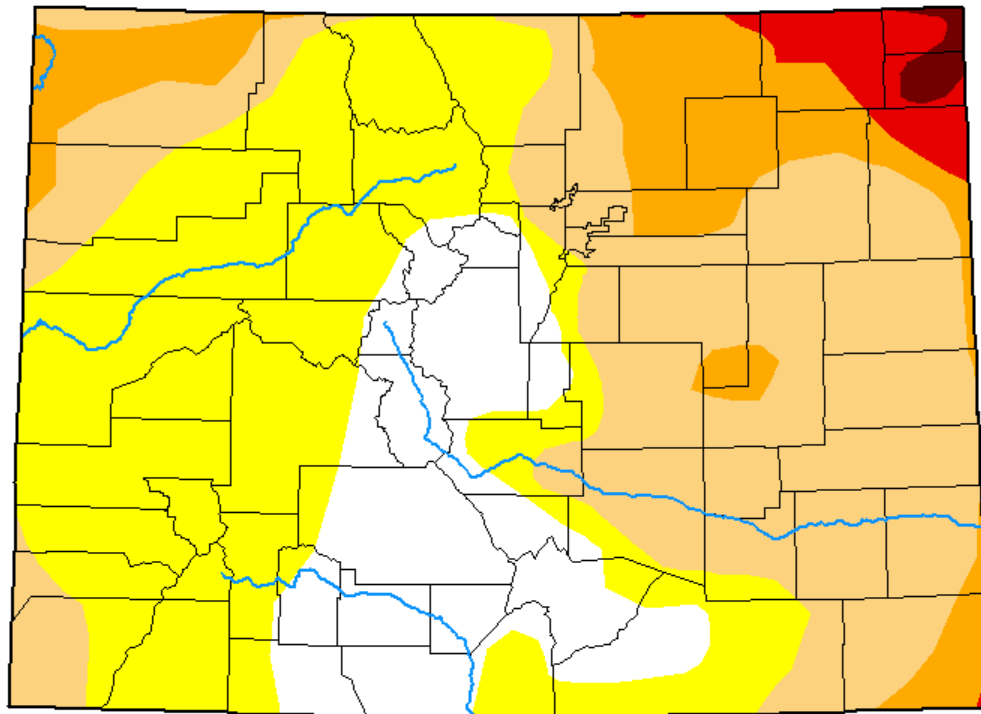
- **Below average precipitation**
- **June – August: Northern Hemisphere's second-hottest meteorological summer**
- **Greeley precipitation is low, but the mountains are not currently in drought**
- **Ski resorts opening and making snow on schedule**
- **Snowpack on track for average SWE that we hope to see**









Current Drought Conditions

U.S. Drought Monitor Colorado

November 1, 2022
(Released Thursday, Nov. 3, 2022)
Valid 8 a.m. EDT



Intensity:

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

Author:

Brian Fuchs
National Drought Mitigation Center



droughtmonitor.unl.edu

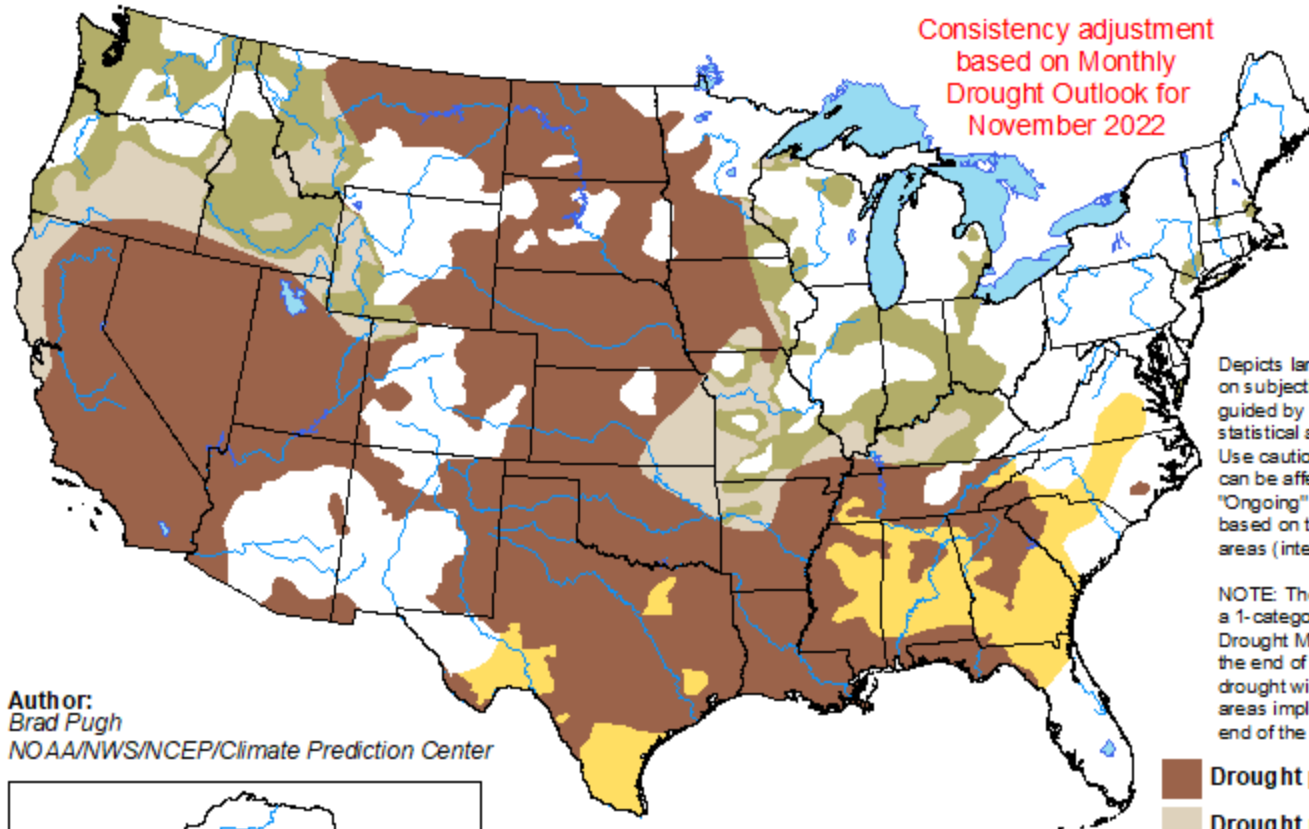


Drought Outlook

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

Valid for November 1, 2022 - January 31, 2023
Released October 31, 2022

Consistency adjustment
based on Monthly
Drought Outlook for
November 2022

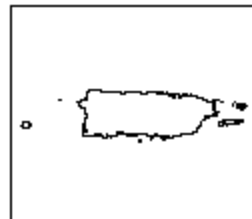
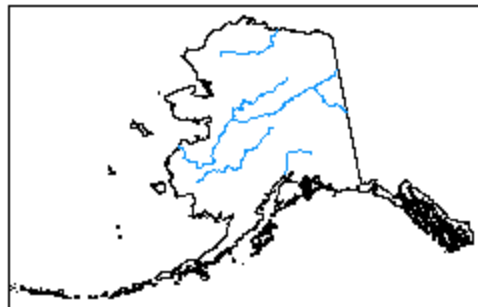


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to 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).

- Drought persists
- Drought remains but improves
- Drought removal likely
- Drought development likely

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<http://go.usa.gov/3eZ73>

City of
Greeley
Colorado

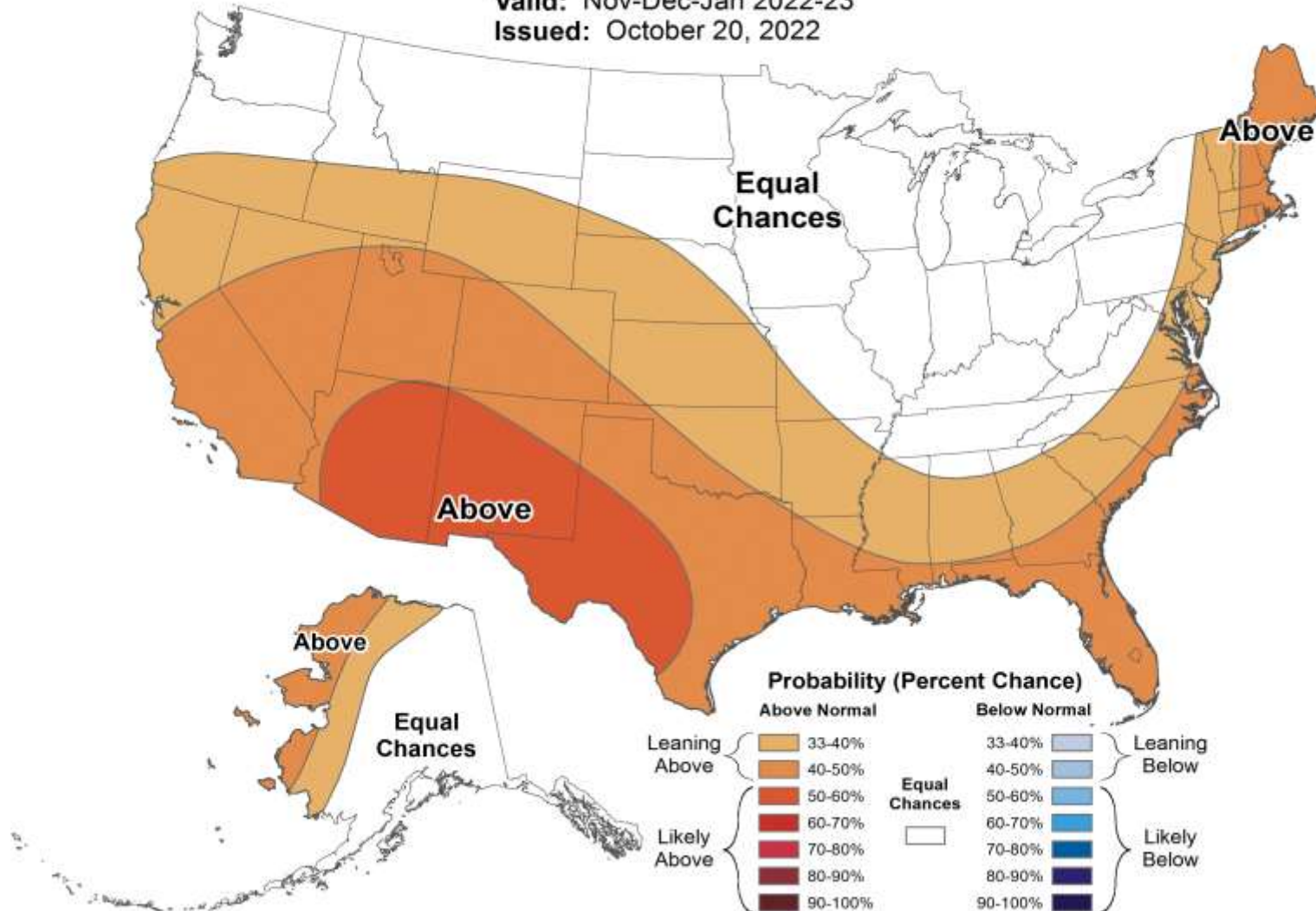
3 month temperature outlook



Seasonal Temperature Outlook



Valid: Nov-Dec-Jan 2022-23
Issued: October 20, 2022



3 month precipitation outlook

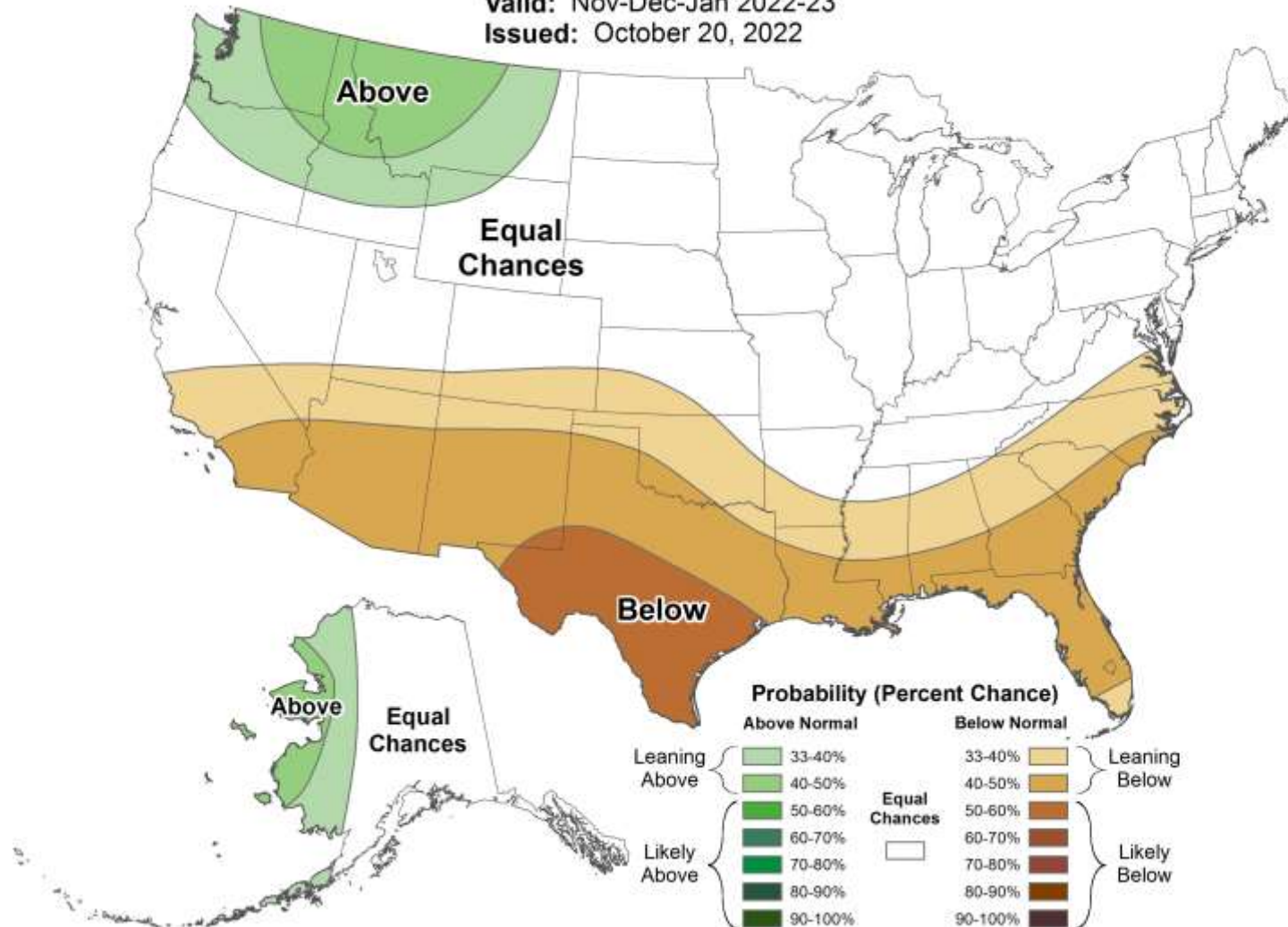


Seasonal Precipitation Outlook

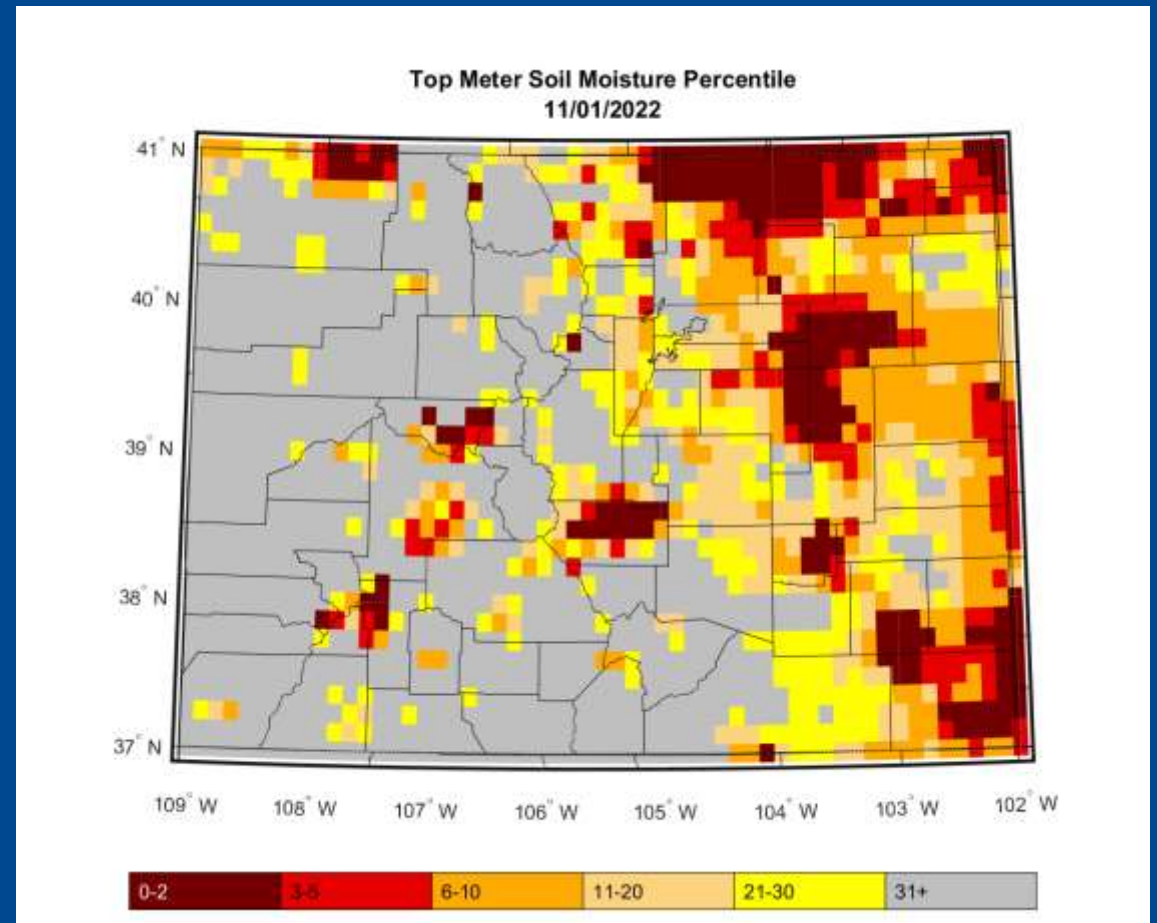
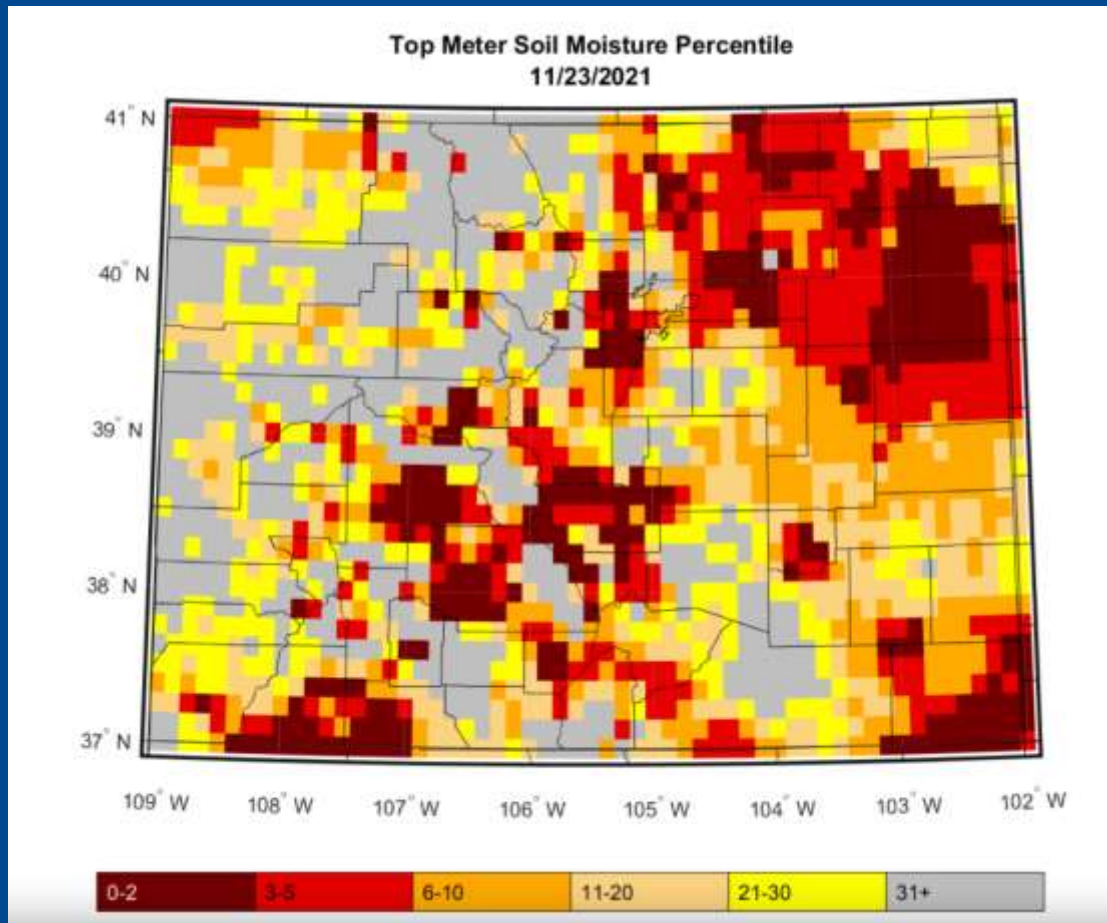


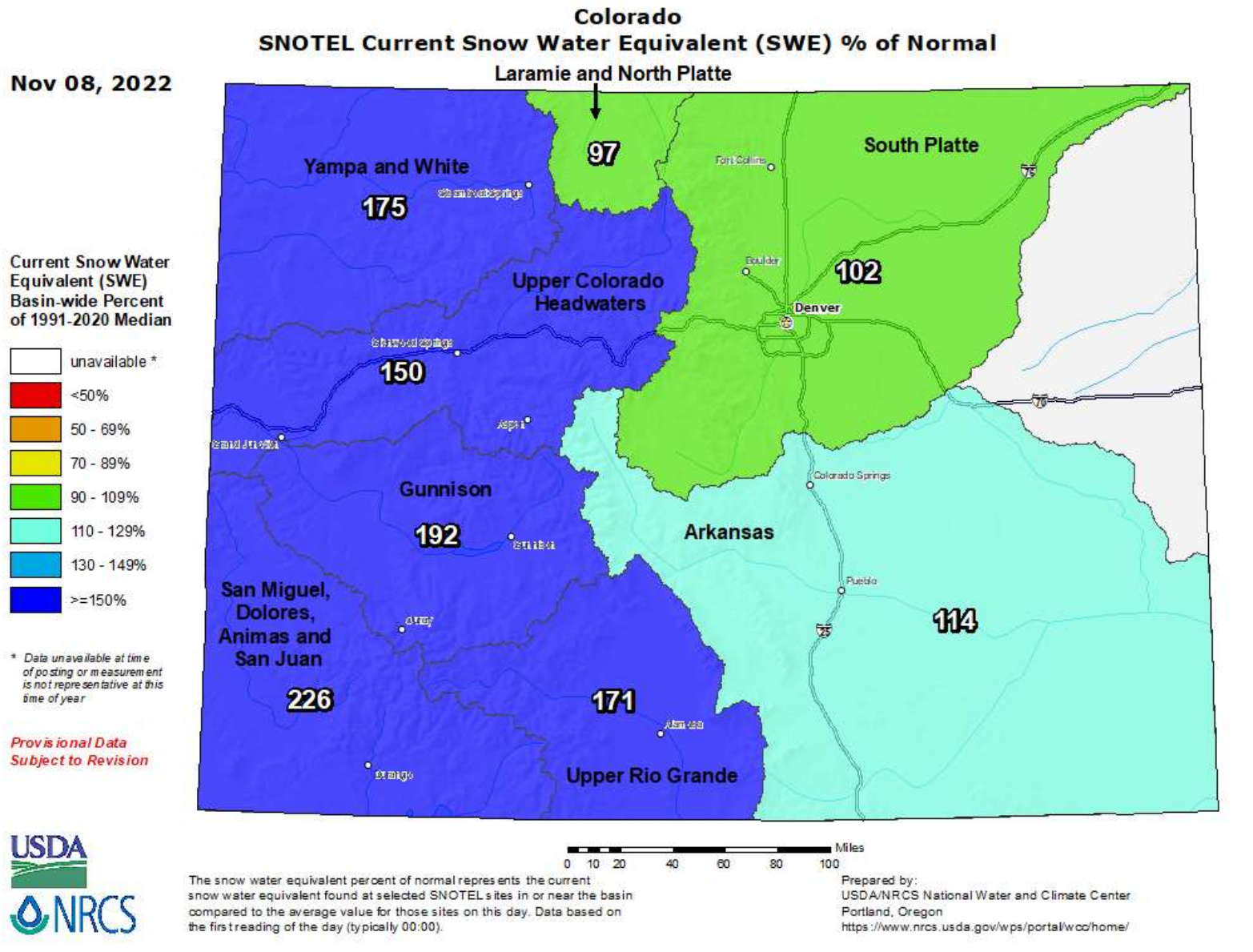
Valid: Nov-Dec-Jan 2022-23

Issued: October 20, 2022



Soil Moisture Comparison





Greeley System Storage

April 1, 2023 Storage (acre-feet)	
CBT	22,112
Windy Gap	1,000
GLIC	12,500
Tunnel	1,000
Total	36,612
Demands (April 1, 2023-March 31, 2024) (acre-feet)	
CBT	18,965
Windy Gap	4,450
GLIC	10,405
Tunnel	1,000
Total	34,820
Yields through April 2024 (acre-feet)	
CBT (Nov. 2022-April 1, 2022)	11,402
Windy Gap	4,366
GLIC	10,653
Tunnel	800
Total	27,221
April 2024 Storage by Source	
CBT	15,728
Windy Gap	0
GLIC	13,000
Tunnel	400
April 2023 Storage	29,128
April 2023 Storage-minus unusable GLIC	21,728
Target Storage Volume	21,300

Summary

- Drought conditions are present and likely to continue with improvement in the mountains
- Moving into our 3rd year of La Nina conditions
 - In Northern Colorado La Nina can equate to colder weather and above average precipitation but not always
 - Improved soil moisture will hopefully yield better runoff in Greeley's river basins



Moving into winter



- **Continue to maintain adequate target storage volume**
- **Monitor drought and water supply closely**

Questions?

