

Water Supply Update and Determination of Water Sufficiency

April 19, 2023

Alex Tennant,
Water Resources Administrator II



City of Greeley: Temperature (°F) and Precipitation 2023

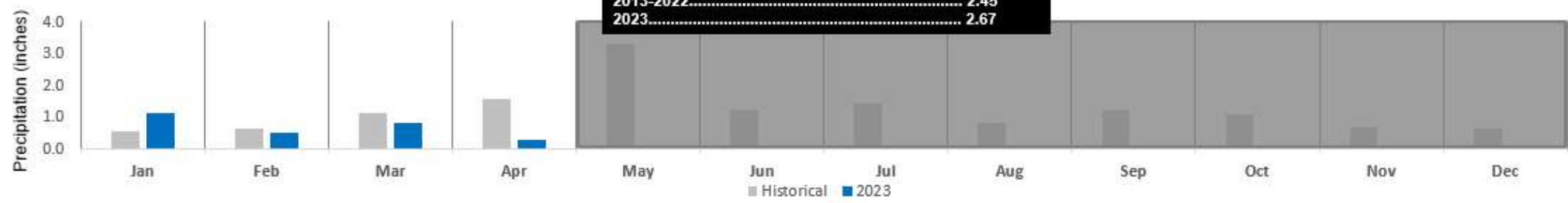


Greeley West station (224)
Source: northernwater.org



	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
2013-2022	28.2° F	29.4° F	40.8° F	47.4° F	55.9° F	70.0° F	74.2° F	72.2° F	64.4° F	48.9° F	37.7° F	27.4° F
2023	24.0° F	27.0° F	34.8° F	44.4° F	0.0° F	0.0° F	0.0° F	0.0° F	0.0° F	0.0° F	0.0° F	0.0° F

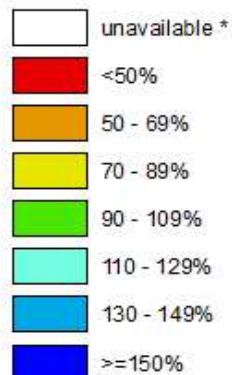
CUMULATIVE PRECIPITATION TO DATE (INCHES)	
2013-2022	2.45
2023	2.67



Colorado
SNOTEL Current Snow Water Equivalent (SWE) % of Normal
 Laramie and North Platte

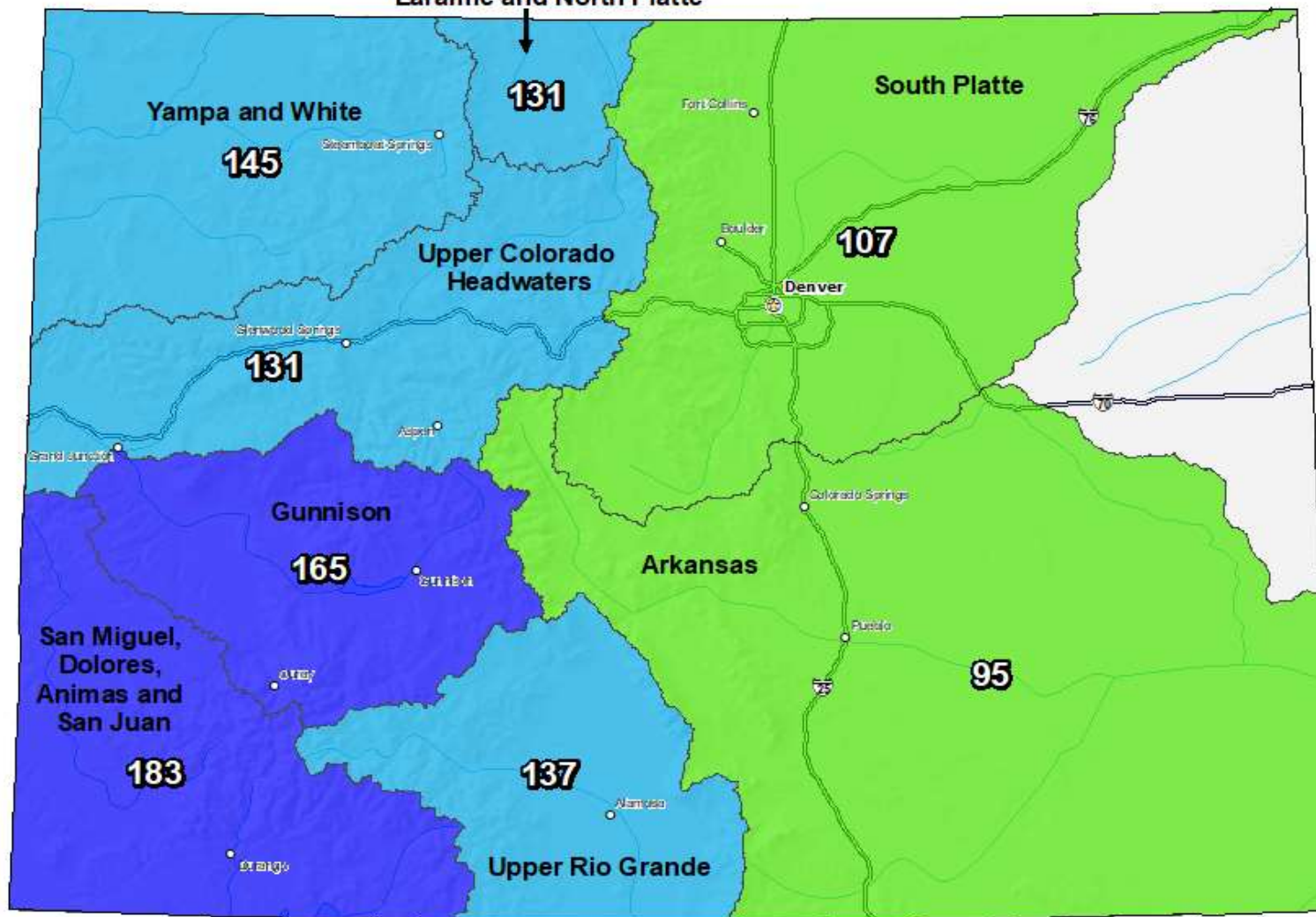
Apr 10, 2023

Current Snow Water Equivalent (SWE) Basin-wide Percent of 1991-2020 Median



* Data unavailable at time of posting or measurement is not representative at this time of year

*Provisional Data
 Subject to Revision*



The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

Prepared by:
 USDA/NRCS National Water and Climate Center
 Portland, Oregon
<https://www.nrcs.usda.gov/wps/portal/wcc/home/>

SNOW WATER EQUIVALENT IN SOUTH PLATTE

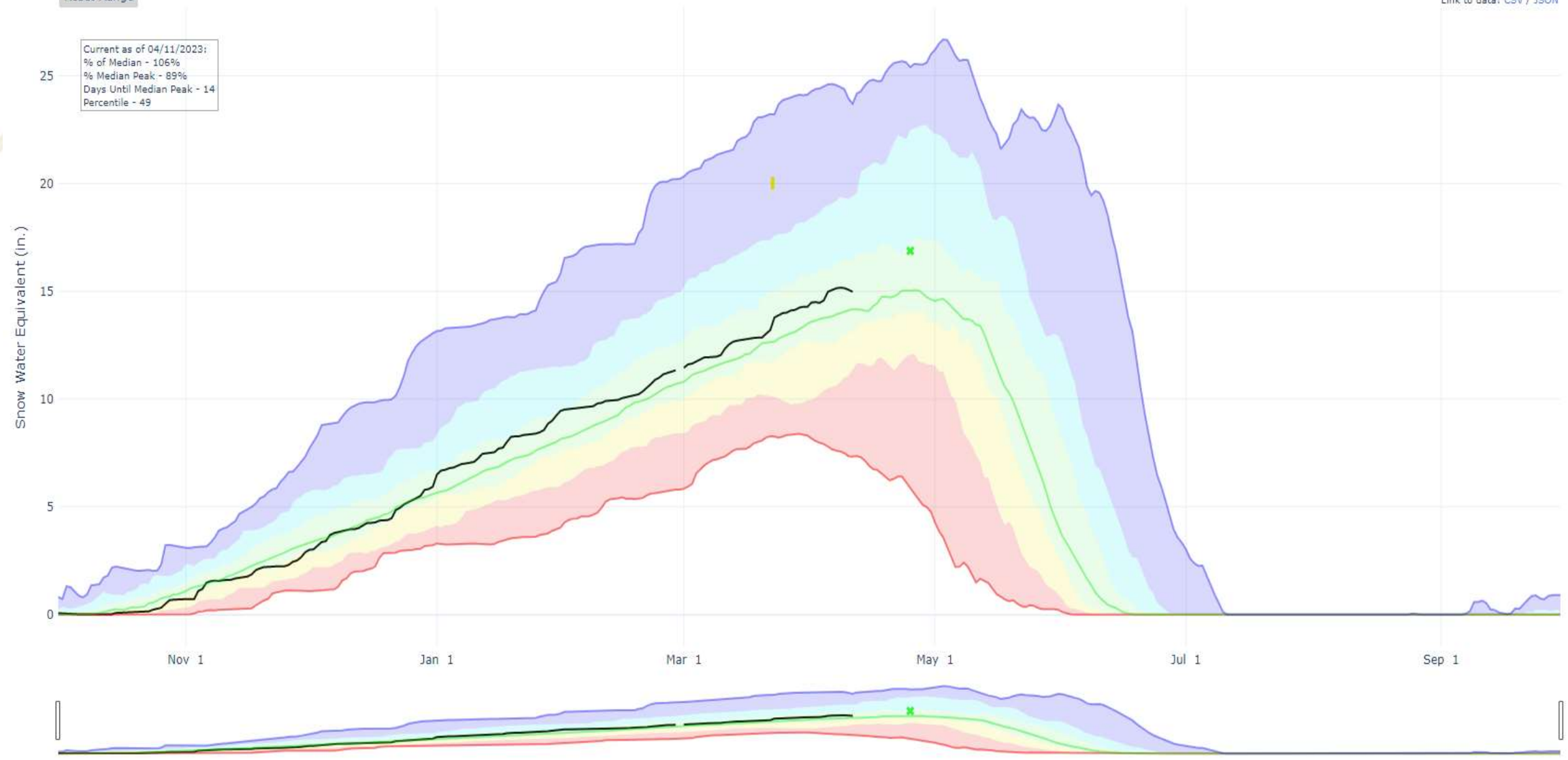
Reset Range

[Link to data: CSV / JSON](#)

Station List

Current as of 04/11/2023:
% of Median - 106%
% Median Peak - 89%
Days Until Median Peak - 14
Percentile - 49

- ★ Median Peak SWE
- Max
- Median (POR)
- Median ('91-'20)
- Min
- Stats. Shading
- 2023 (21 sites)
- 2022 (21 sites)
- 2021 (21 sites)
- 2020 (21 sites)
- 2019 (21 sites)
- 2018 (21 sites)
- 2017 (21 sites)
- 2016 (21 sites)
- 2015 (21 sites)
- 2014 (21 sites)
- 2013 (21 sites)
- 2012 (21 sites)
- 2011 (21 sites)
- 2010 (20 sites)
- 2009 (19 sites)
- 2008 (18 sites)
- 2007 (18 sites)
- 2006 (18 sites)
- 2005 (17 sites)
- 2004 (17 sites)
- 2003 (17 sites)
- 2002 (17 sites)
- 2001 (17 sites)
- 2000 (17 sites)
- 1999 (16 sites)
- 1998 (12 sites)

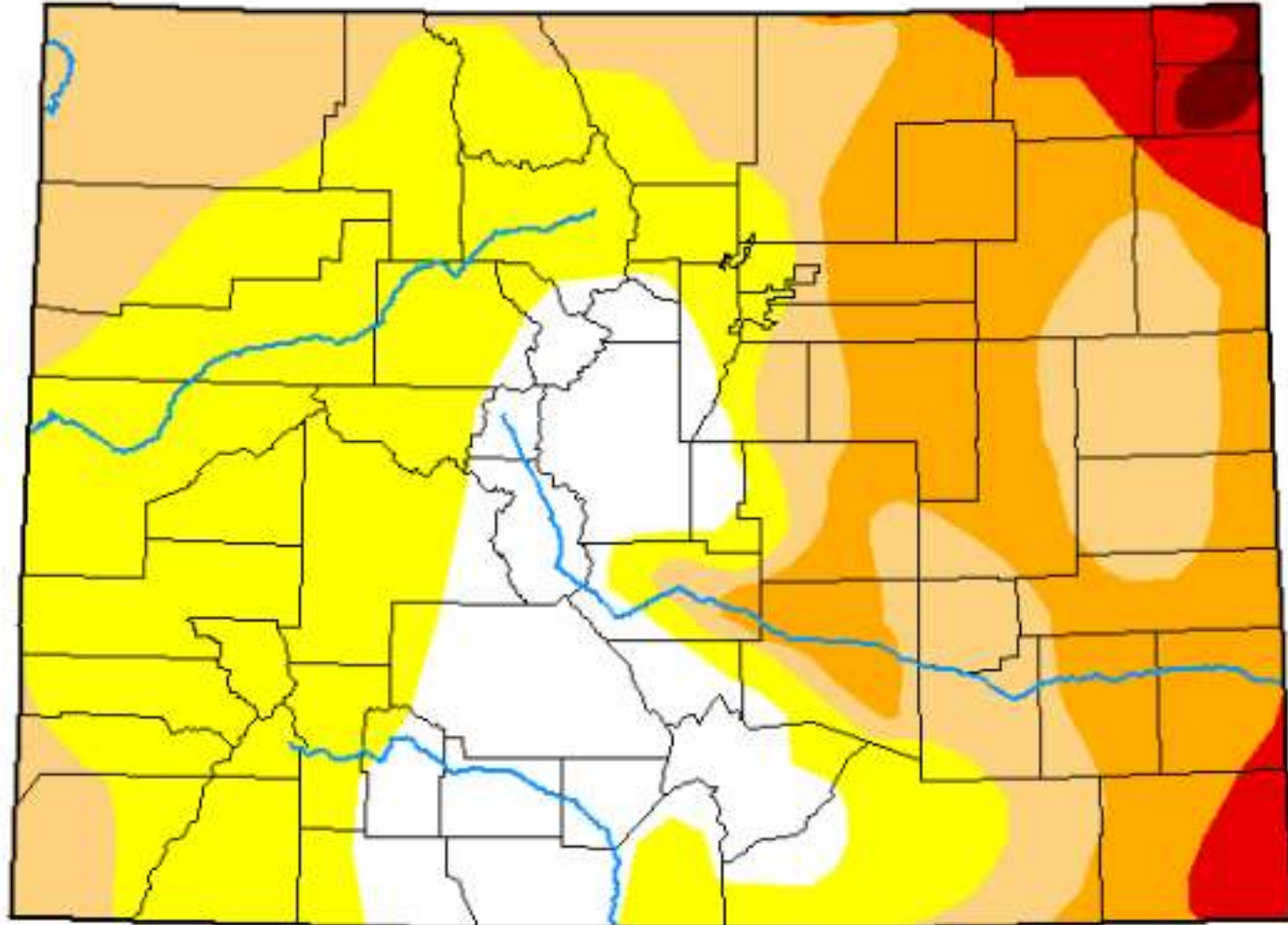


Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th Percentiles
For more information visit: [30-Year Hydroclimatic Normals](#)










**Apr-Jul Maximum, Minimum
and Most Probable Streamflow Forecasts (1000 af)**

Watershed	Forecast Minimum	Most Probable	Forecast Maximum	Apr-Jul Avg ⁽³⁾	Most Prob % Average
Blue River	192	257	322	283	91%
Upper Colorado River	199	250	314	226	111%
Willow Creek	60	76	92	50	152%
Fraser River	93	123	153	118	104%
Poudre River	168	250	332	230	109%
Big Thompson River	68	104	140	91	114%
St. Vrain River	65	98	131	90	109%
Boulder Creek	39	55	71	54	102%
South Platte Tributaries	--	507	--	465	109%

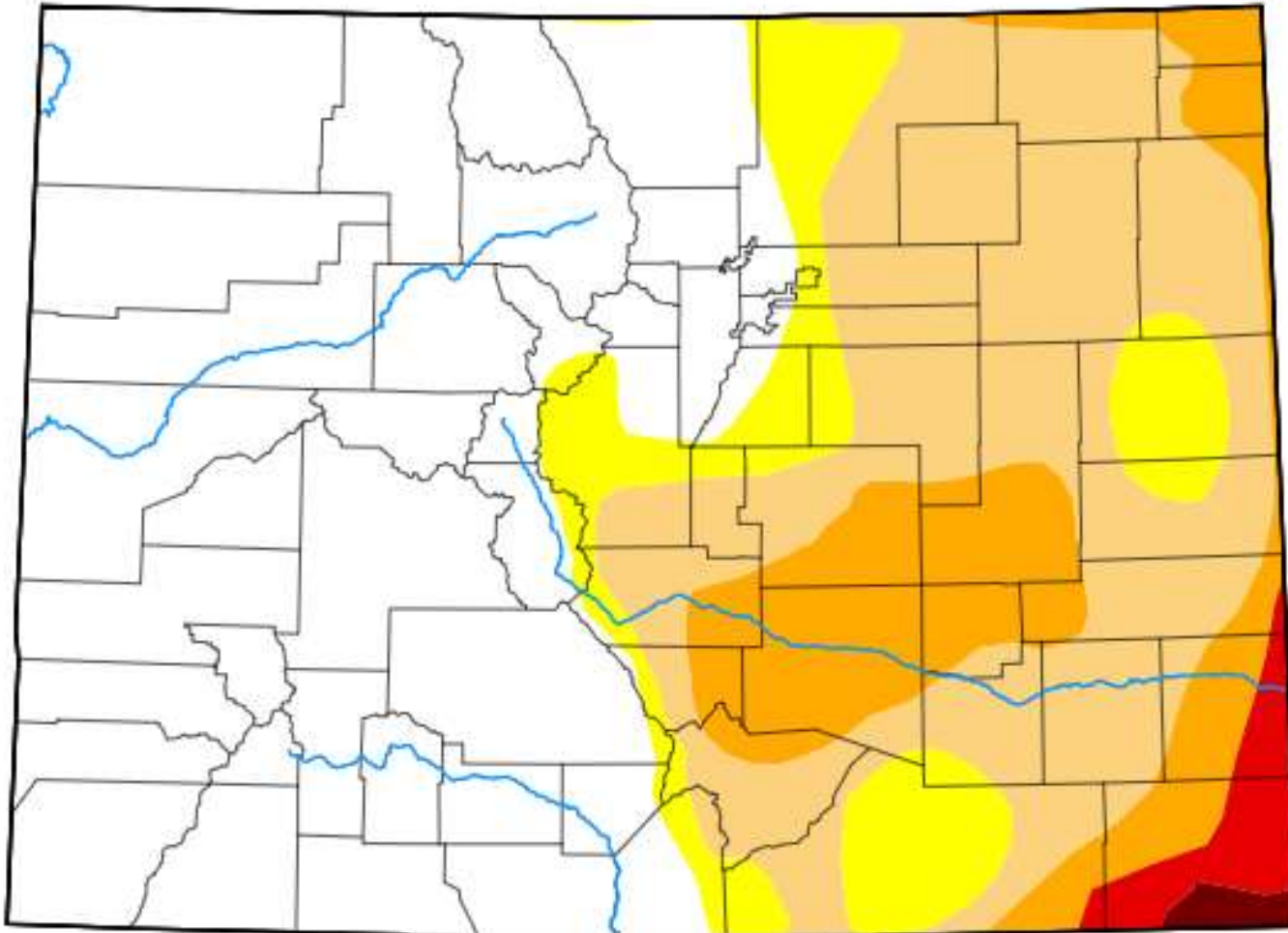


November 29, 2022

Intensity








-  None
-  D0 (Abnormally Dry)
-  D1 (Moderate Drought)
-  D2 (Severe Drought)
-  D3 (Extreme Drought)
-  D4 (Exceptional Drought)
-  No Data





April 4, 2023

Intensity

-  None
-  D0 (Abnormally Dry)
-  D1 (Moderate Drought)
-  D2 (Severe Drought)
-  D3 (Extreme Drought)
-  D4 (Exceptional Drought)
-  No Data

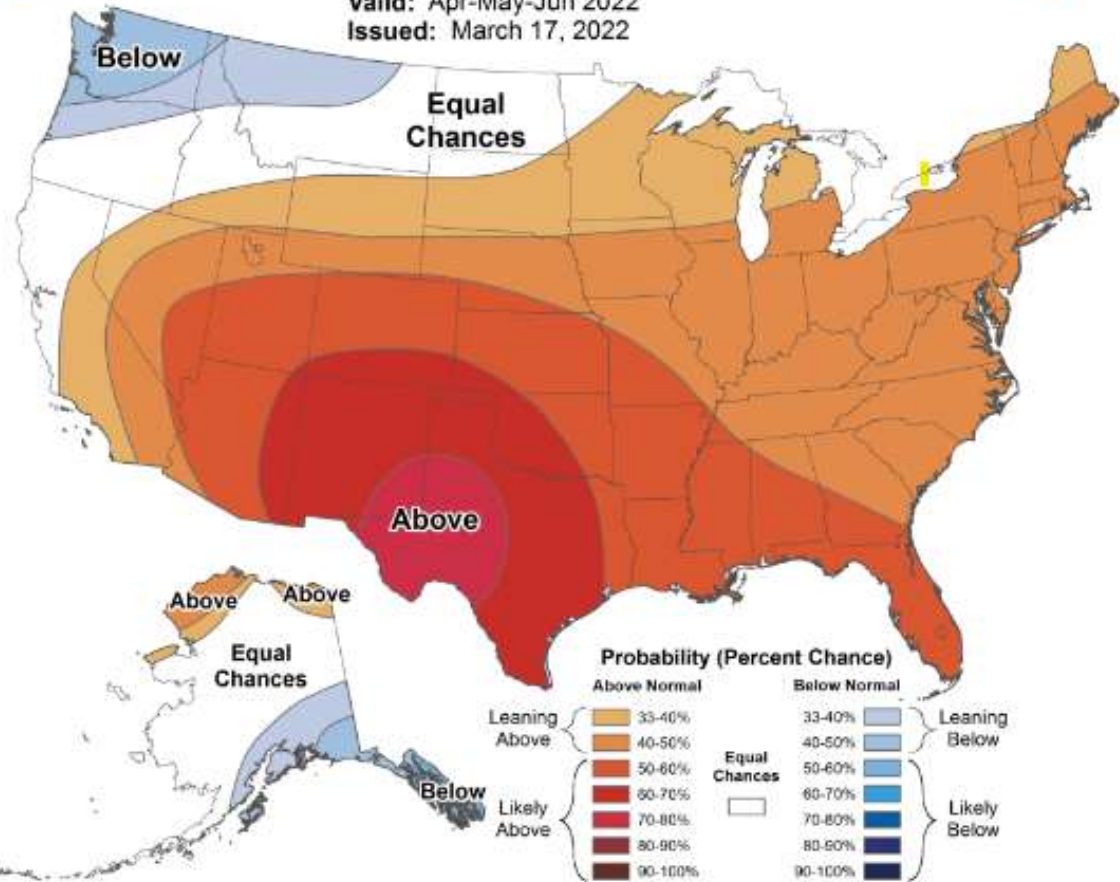




Seasonal Temperature Outlook



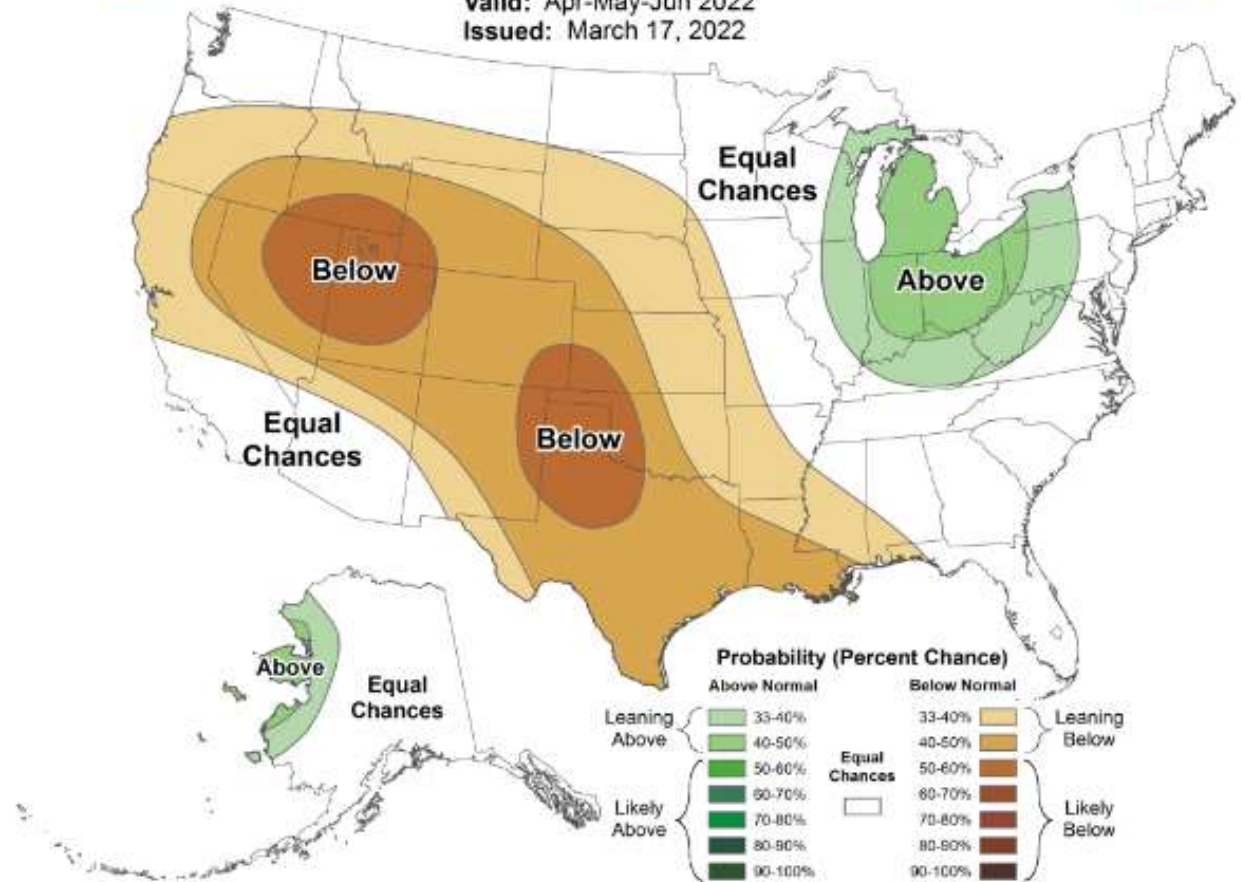
Valid: Apr-May-Jun 2022
Issued: March 17, 2022



Seasonal Precipitation Outlook



Valid: Apr-May-Jun 2022
Issued: March 17, 2022

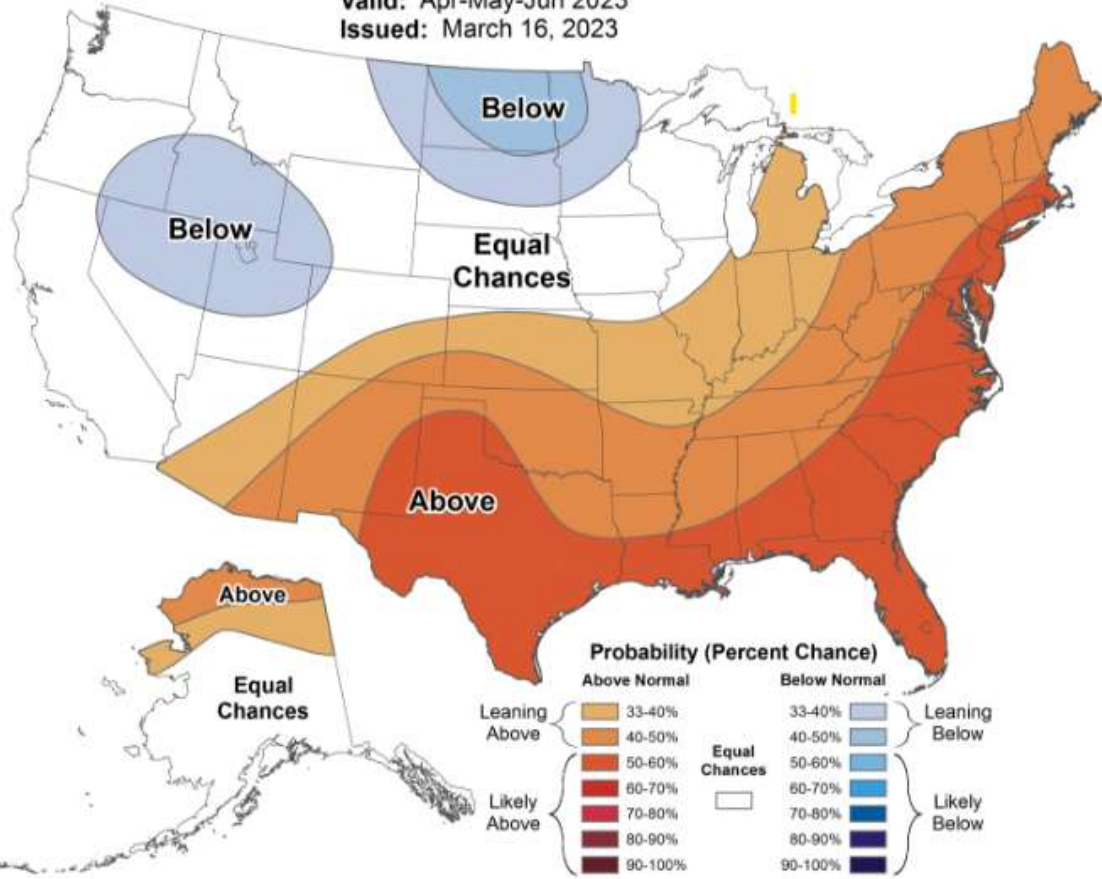




Seasonal Temperature Outlook



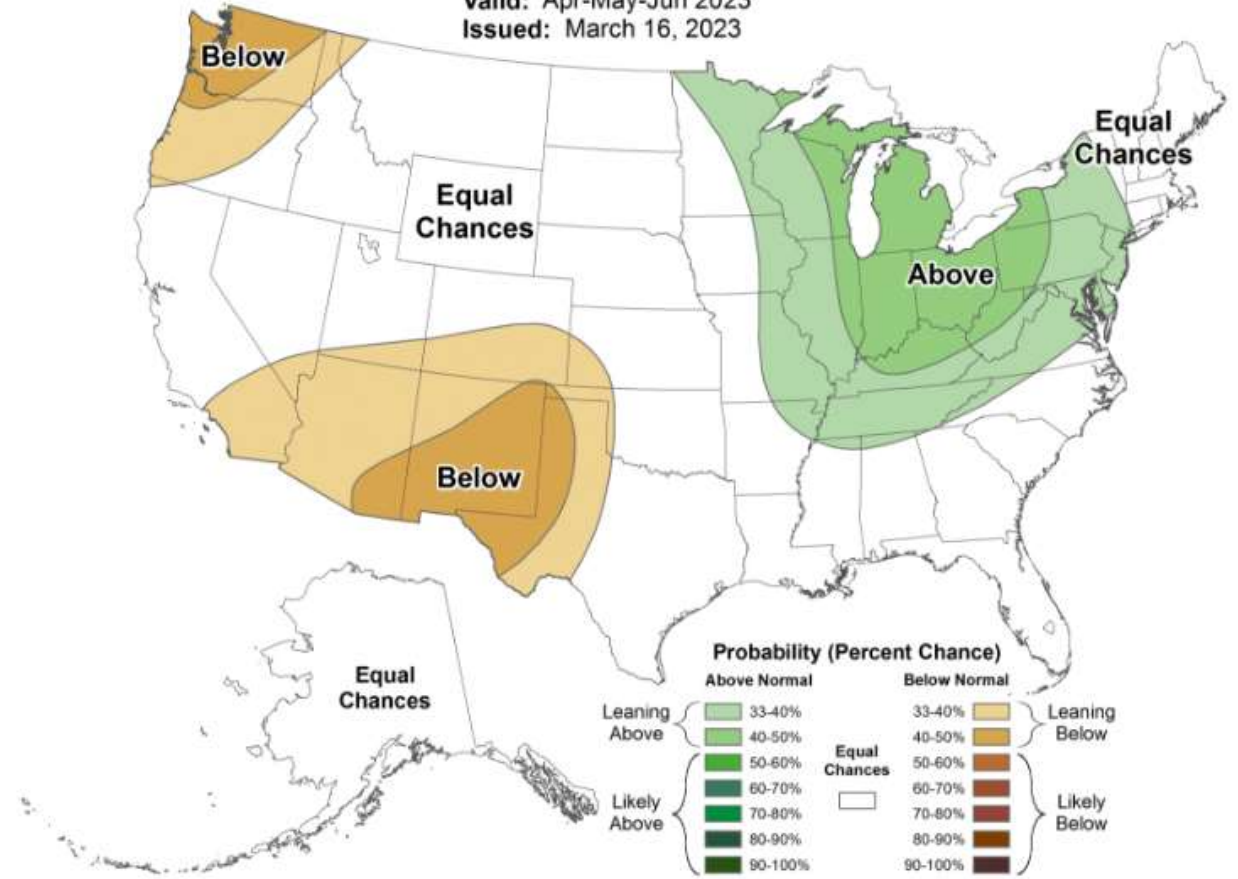
Valid: Apr-May-Jun 2023
Issued: March 16, 2023



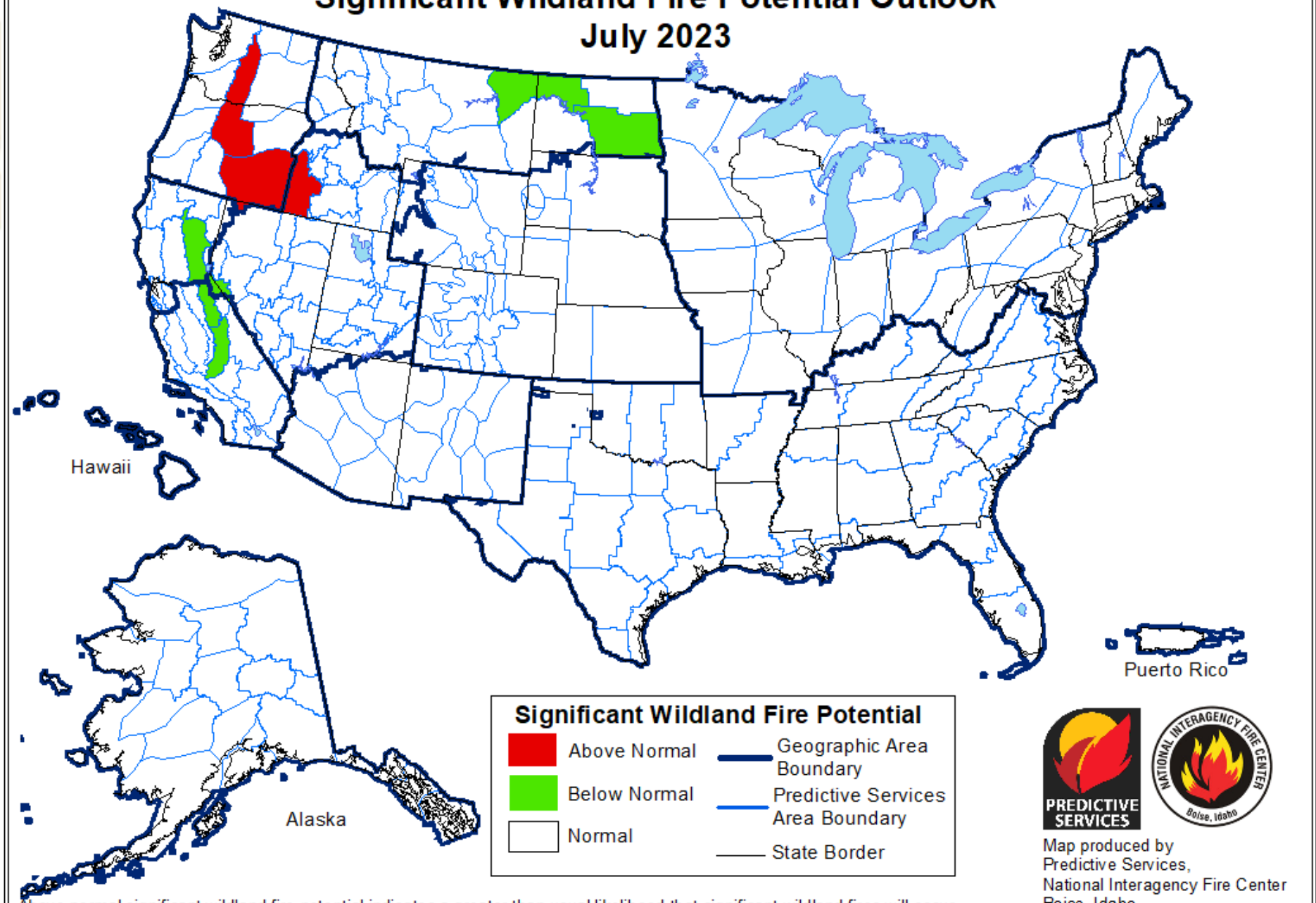
Seasonal Precipitation Outlook



Valid: Apr-May-Jun 2023
Issued: March 16, 2023



Significant Wildland Fire Potential Outlook July 2023



Above normal significant wildland fire potential indicates a greater than usual likelihood that significant wildland fires will occur. Significant wildland fires should be expected at typical times and intervals during normal significant wildland fire potential conditions. Significant wildland fires are still possible but less likely than usual during forecasted below normal periods.



Map produced by
Predictive Services,
National Interagency Fire Center
Boise, Idaho
Issued April 1, 2023
Next issuance May 1, 2023

Target Storage Assumptions

- 70% quota from Northern (issued Apr 13)
- GLIC dividends for dry-year
- 2012 water demands
- No additional pumping of Windy Gap water
 - 1000 acre-feet of WG carryover
- 500 acre-feet of directs unable to be treated due to water quality issues from Cameron Peak fire impacts



21,300 AF Target Storage

April 2023 Storage (acre-feet)	
CBT	22,774
Windy Gap	1,000
GLIC	13,498
Tunnel	968
Total	38,240
Demands (April 2023 - March 2024) (acre-feet)	
CBT	12,272
Windy Gap	2,500
GLIC	10,462
Tunnel	1,140
Total	26,374
Yields through April 2024 (acre-feet)	
CBT (Nov. 2022-April 1, 2022)	11,402
Windy Gap	3,500
GLIC	9,816
Tunnel	850
Total	25,568
April 2024 Storage by Source	
CBT	17,460
Windy Gap	0
GLIC	12,852
Tunnel	678
April 2024 Storage	30,990
Target Storage Volume	21,300



Recommendations

- Declare “Adequate Water Year”
- Maintain target storage volume at 21,300 AF
- Continue long-term rentals
- Rent excess supply

