

# Water Supply Update

## April 20, 2022

Water & Sewer Board

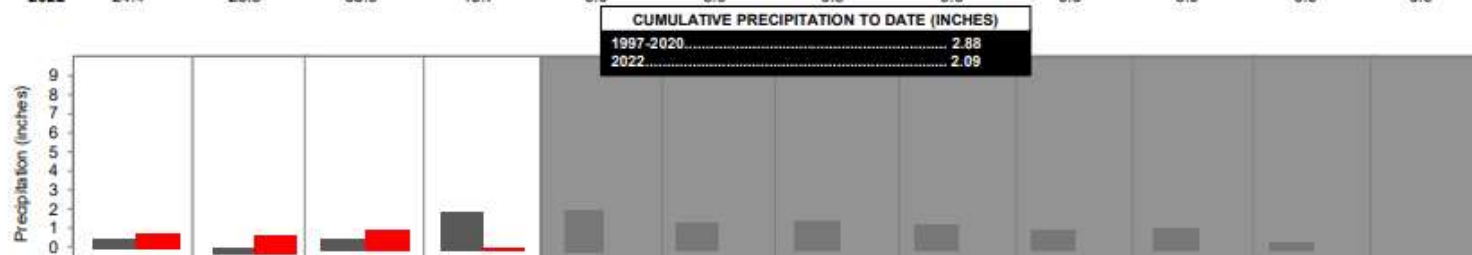
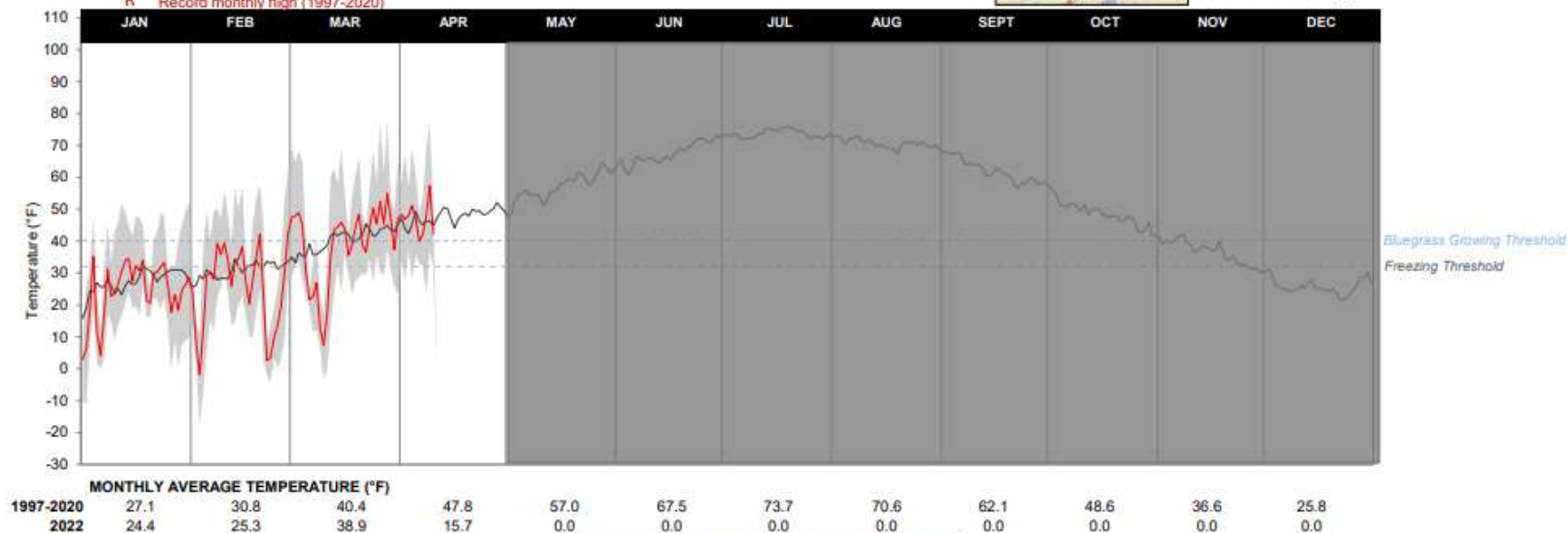


# City of Greeley: Temperature (°F) and Precipitation 1997-2022

- 1997-2020 Average Temperature
- 2022 Average Daily Temperature
- 2022 Daily Temperature Range
- R Record monthly high (1997-2020)



Greeley West station (224)  
Source: northernwater.org



CUMULATIVE PRECIPITATION TO DATE (INCHES)	
1997-2020	2.88
2022	2.09

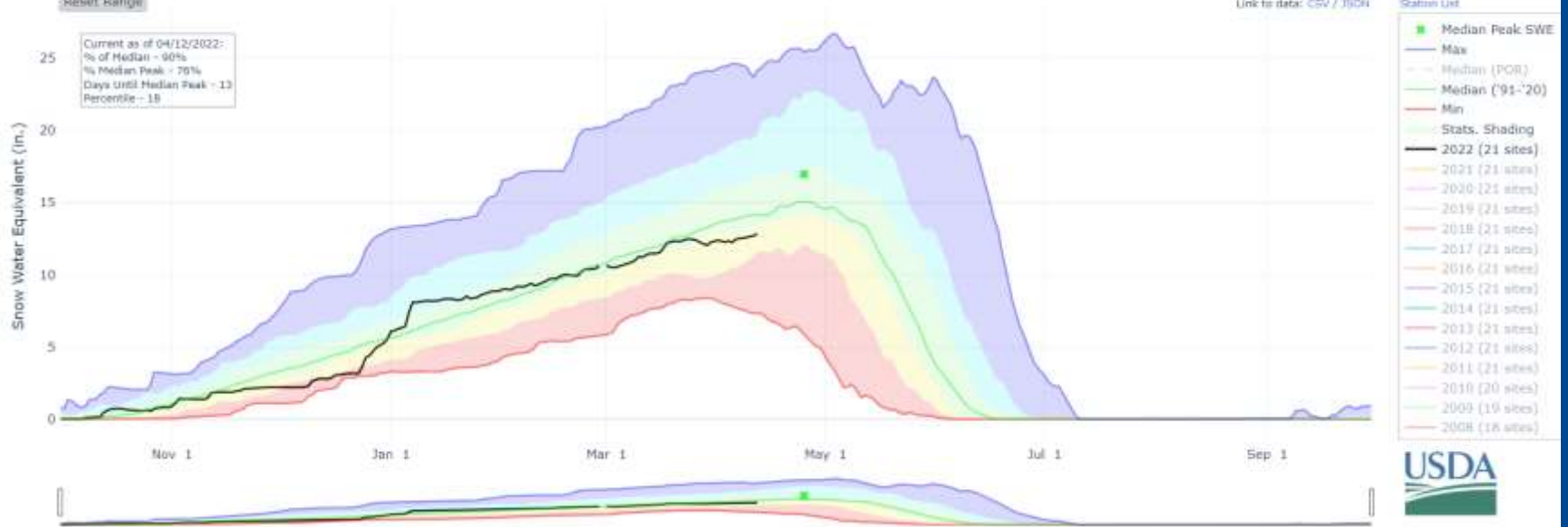
# SNOW WATER EQUIVALENT IN SOUTH PLATTE

Reset Range

Link to data: CSV / JSON

Station List

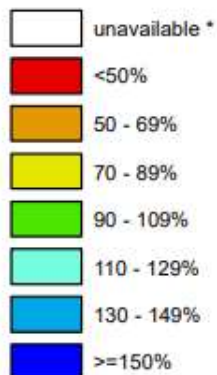
Current as of 04/12/2022:  
% of Median - 90%  
% Median Peak - 70%  
Days until Median Peak - 13  
Percentile - 18



# Colorado SNOTEL Current Snow Water Equivalent (SWE) % of Normal

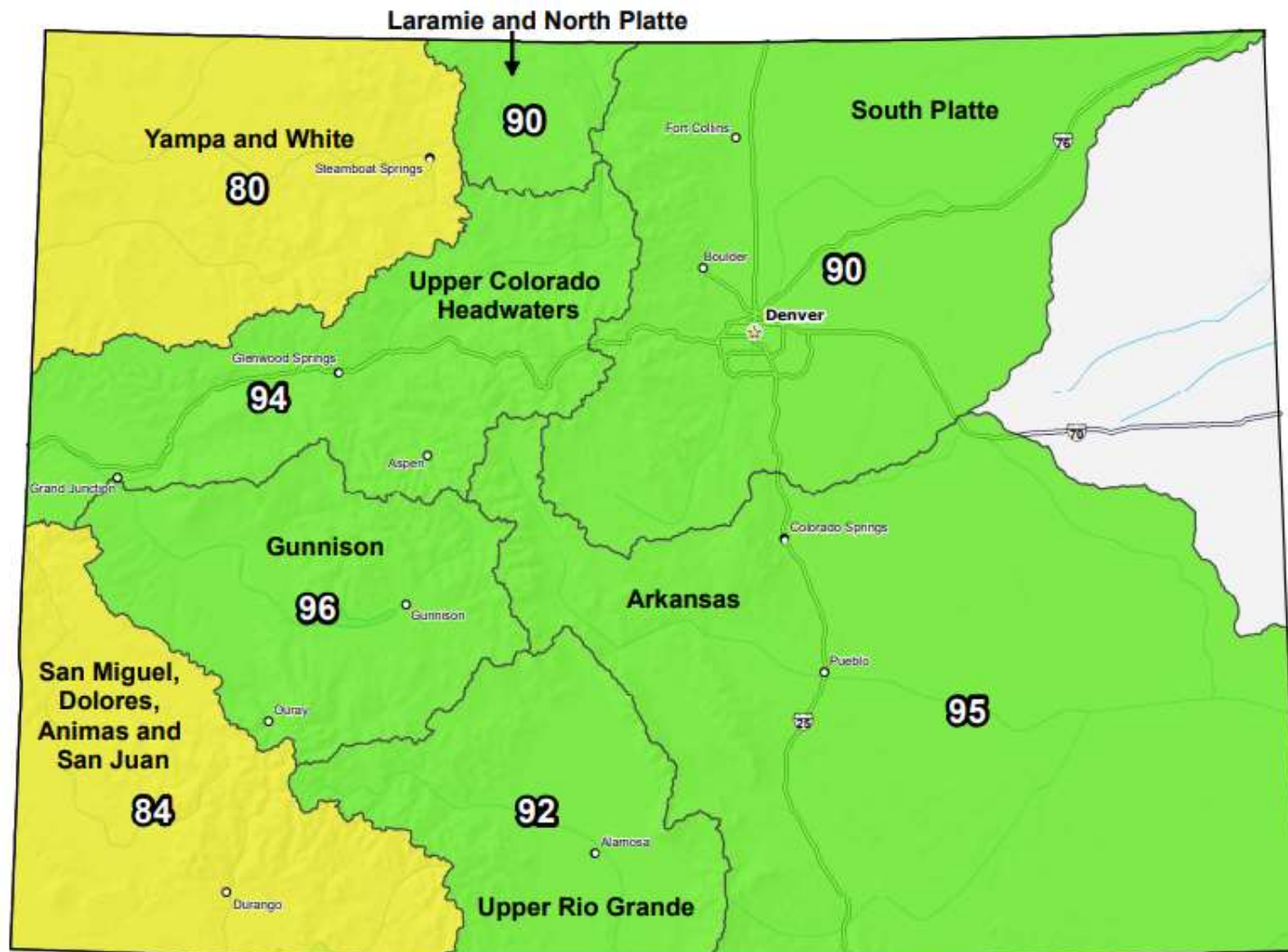
Apr 12, 2022

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**



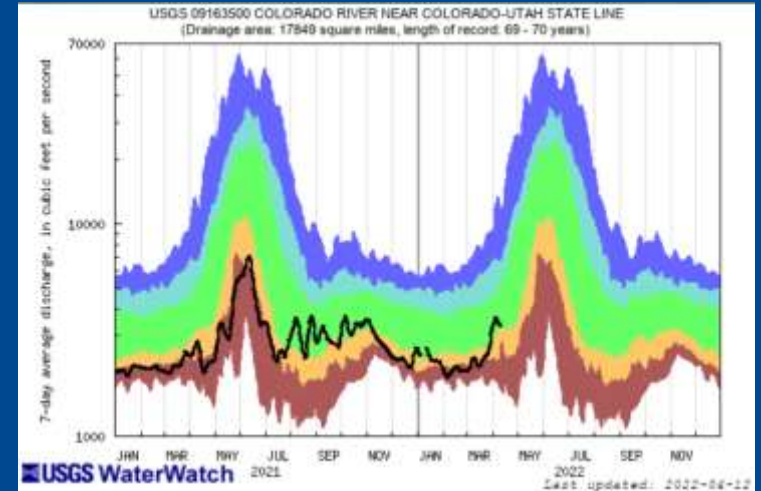
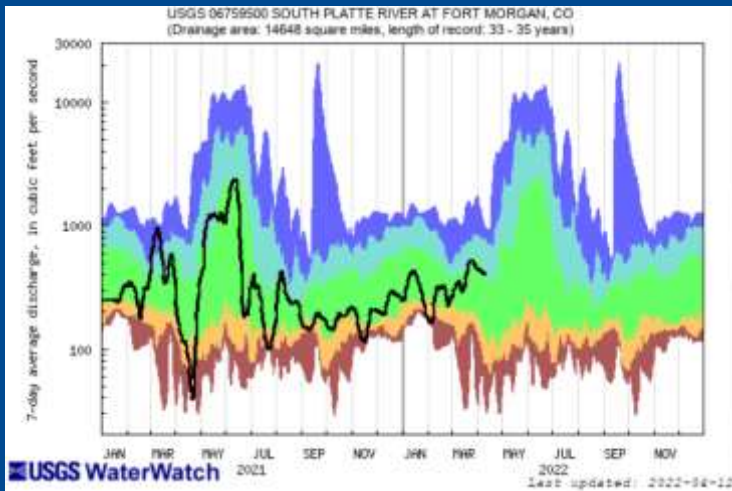
0 10 20 40 60 80 100 Miles

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/>



# Stream Flows & Forecasts

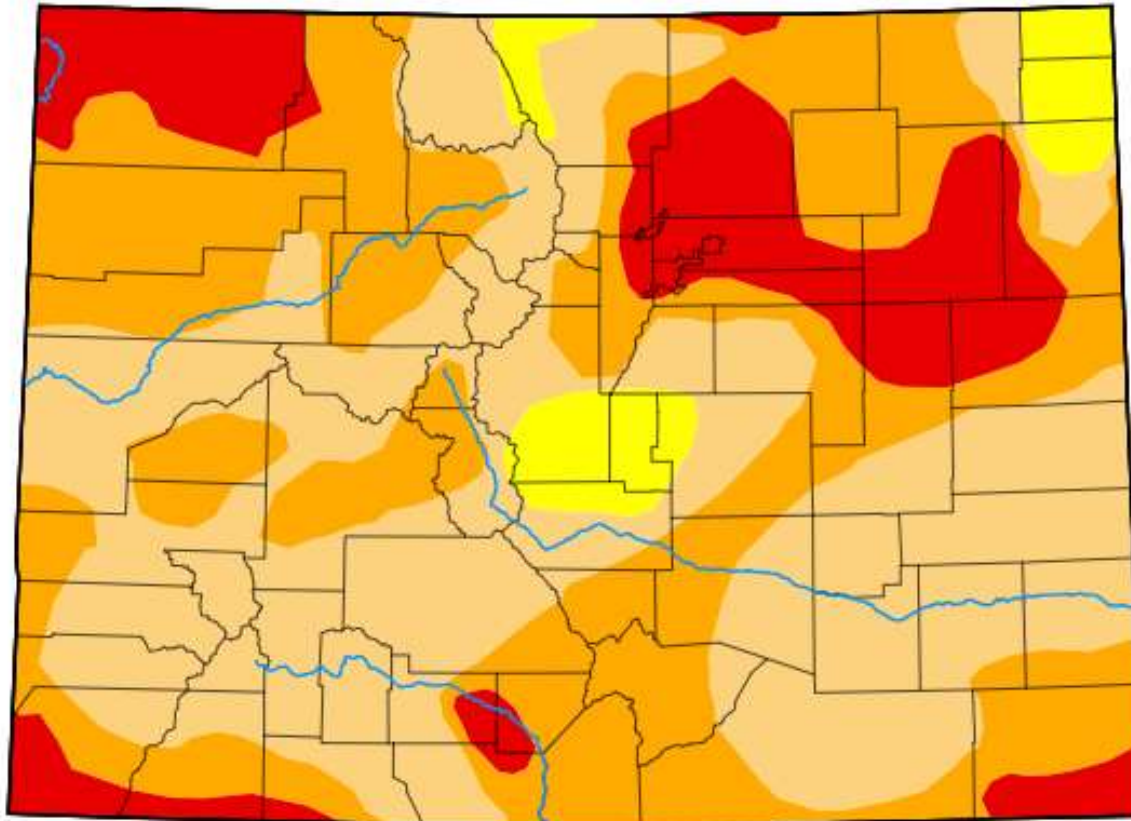


## Apr-Jul Maximum, Minimum and Most Probable Streamflow Forecasts (1000 af)

Watershed	Forecast Minimum	Most Probable	Forecast Maximum	Apr-Jul Avg <sup>(3)</sup>	Most Prob % Avg
Blue River	159	224	288	283	79%
Upper Colorado River	156	196	246	226	87%
Willow Creek	33	48	63	50	96%
Fraser River	67	96	125	118	81%
Poudre River	130	213	296	230	93%
Big Thompson River	49	84	119	91	92%
St. Vrain River	53	87	121	90	97%
Boulder Creek	36	51	67	54	94%
South Platte Tributaries	--	435	--	465	94%



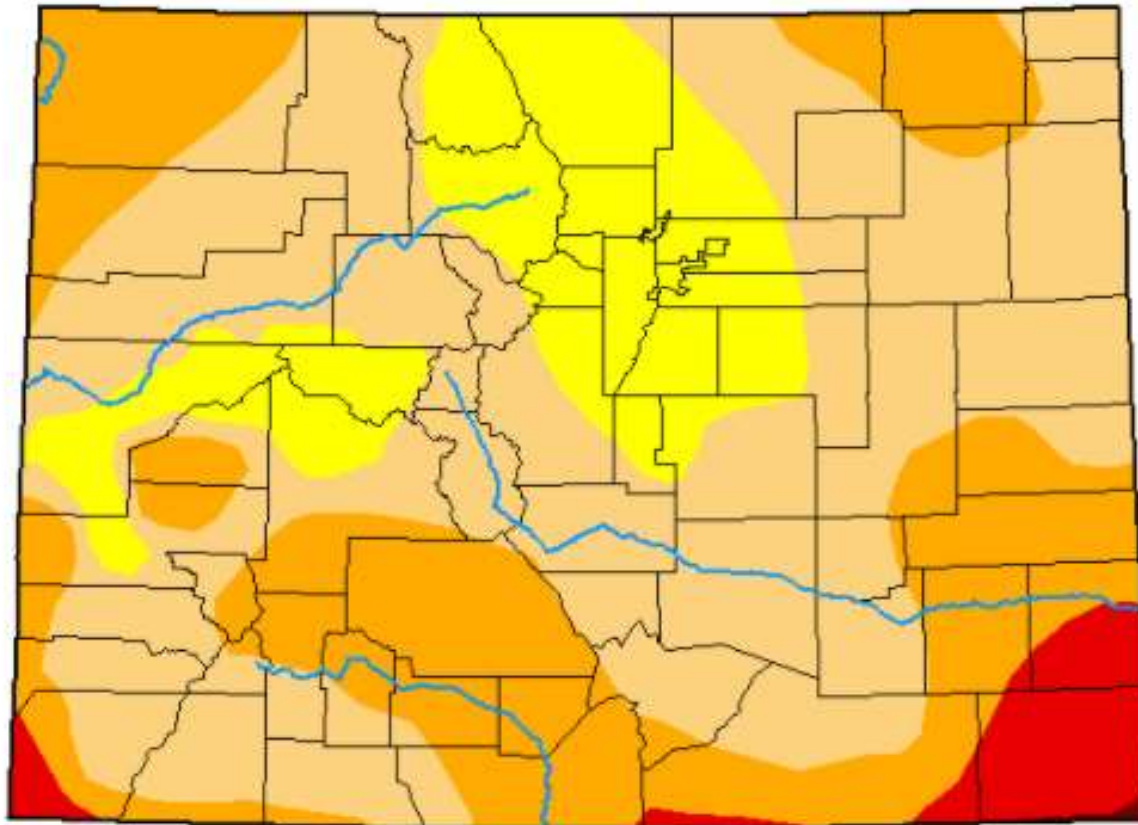
# Drought Conditions November 2021



## Intensity:

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)

# Drought Conditions April 2022



## Intensity:

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)

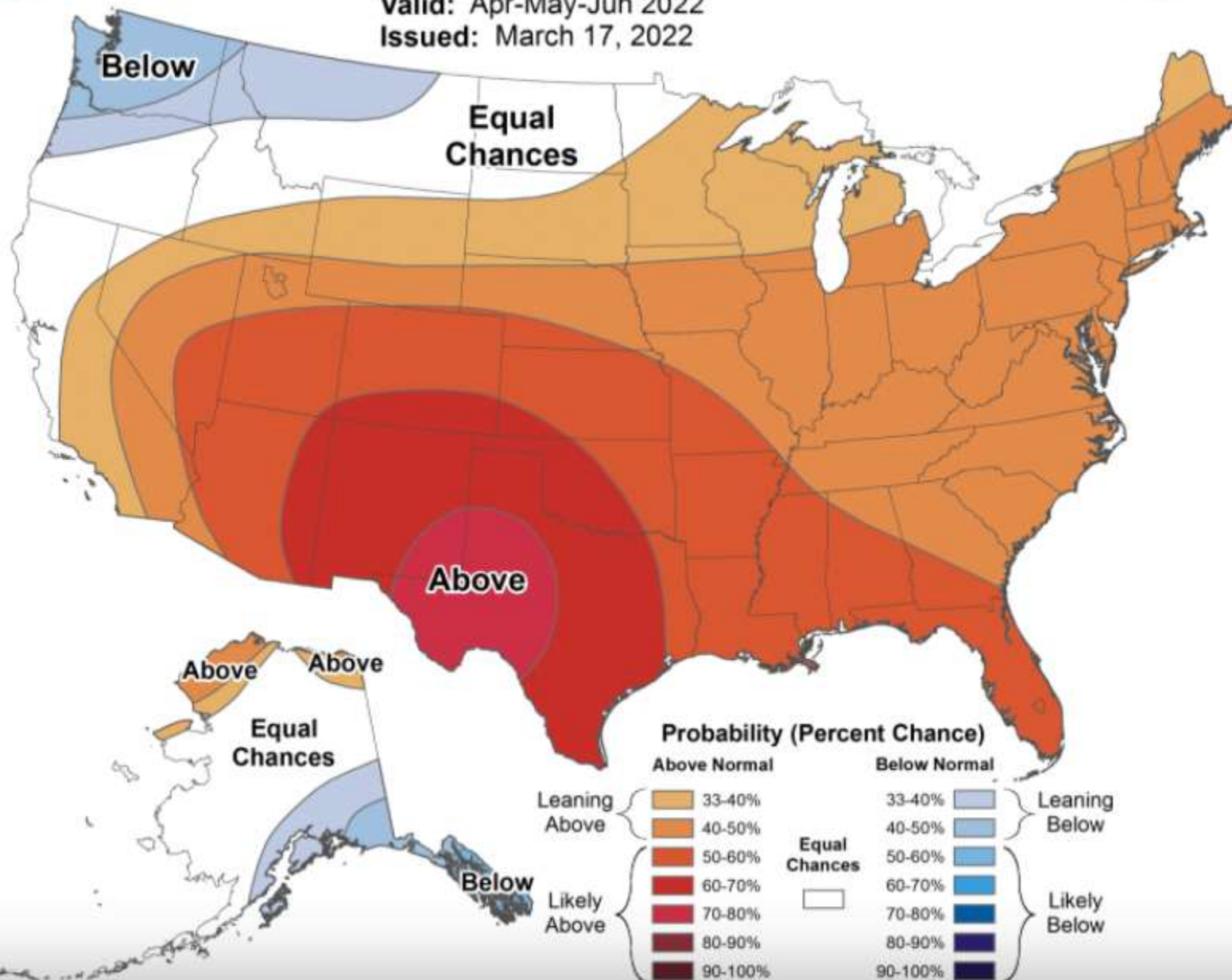


# Seasonal Temperature Outlook



Valid: Apr-May-Jun 2022

Issued: March 17, 2022





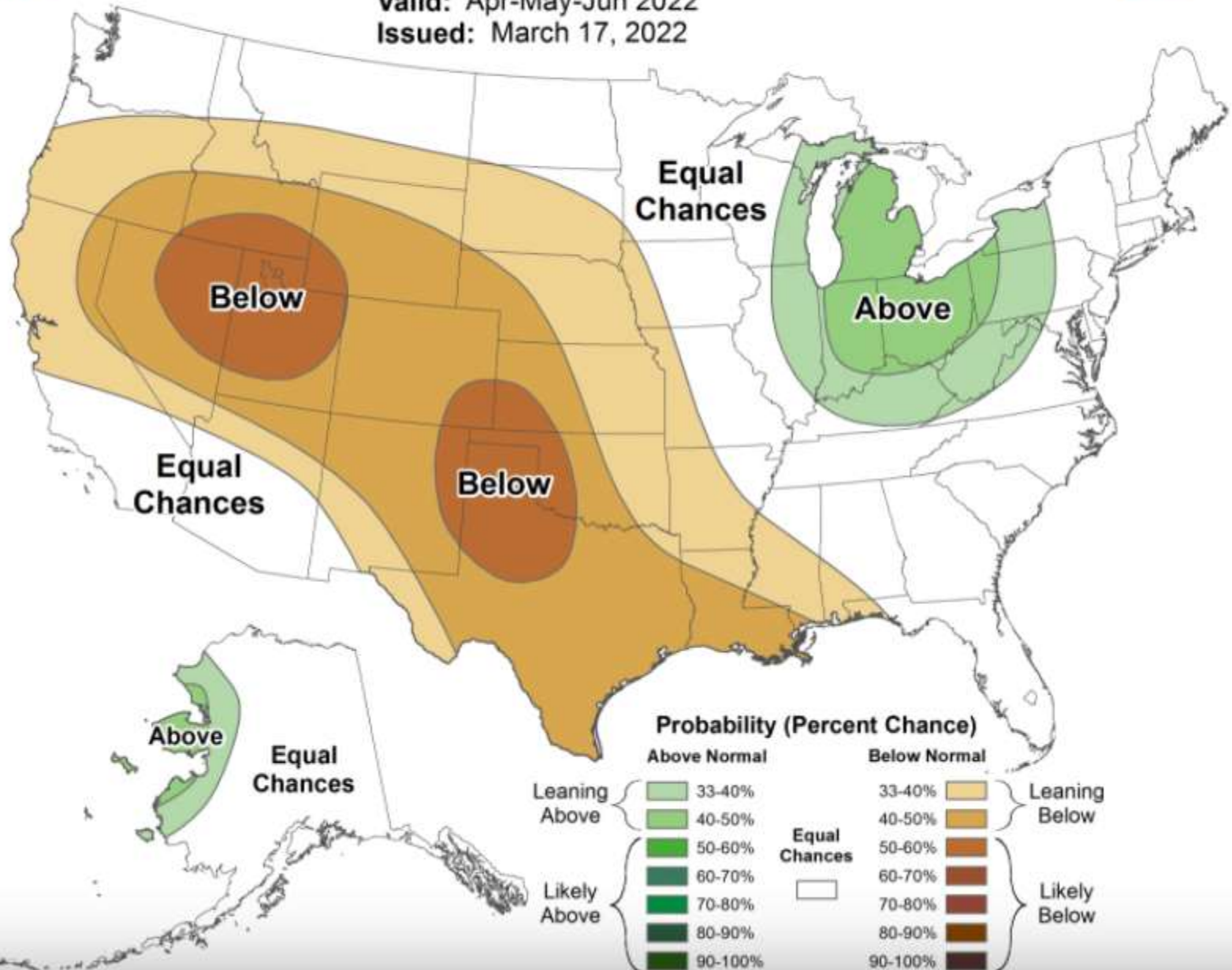


# Seasonal Precipitation Outlook

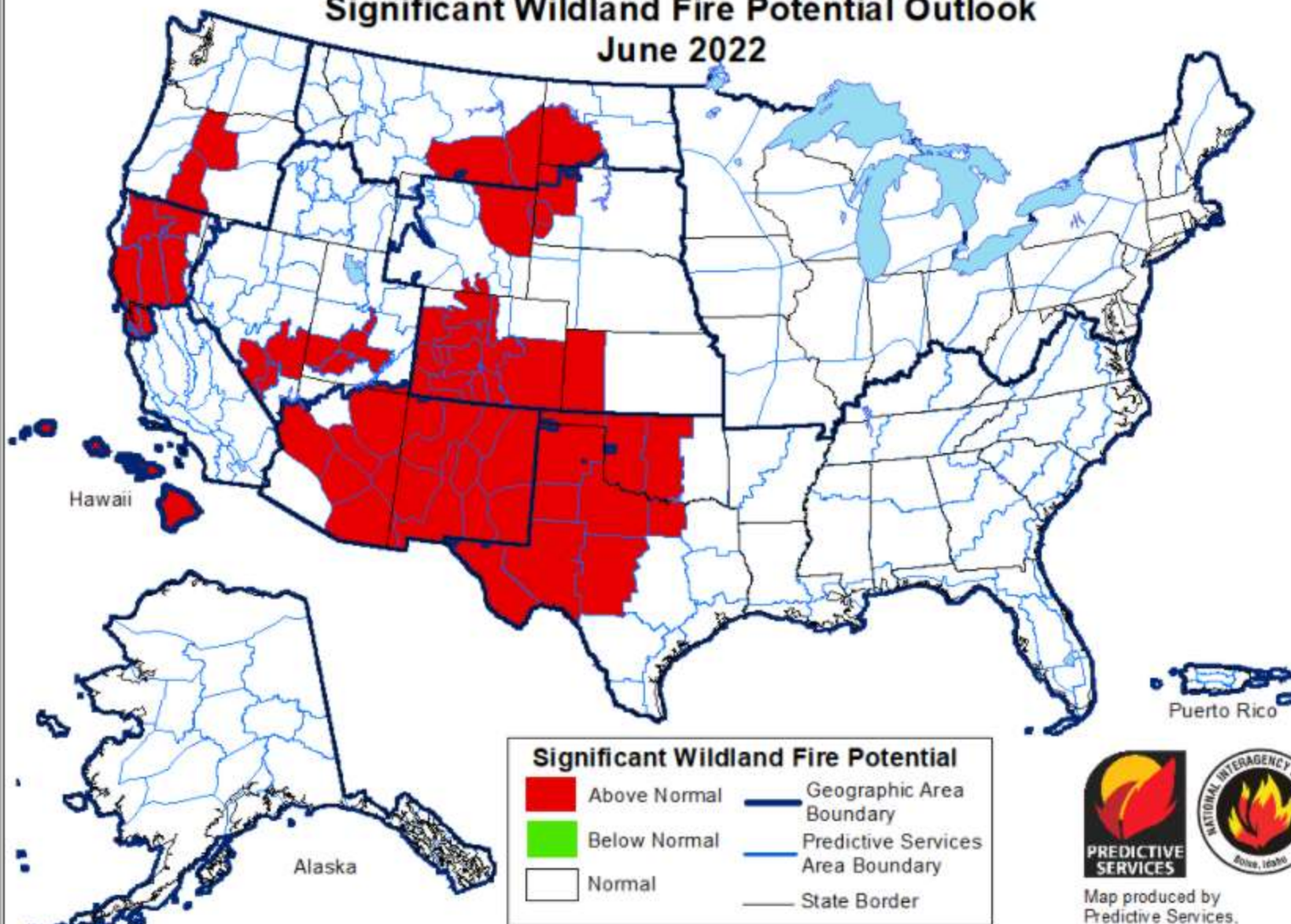


Valid: Apr-May-Jun 2022

Issued: March 17, 2022



# Significant Wildland Fire Potential Outlook June 2022



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, 2022  
Next issuance May 1, 2022

# 2022 Fire Mitigation Plans

- Complete 6 point mitigation projects from 2021 with Emergency Watershed Protection funding
- Received \$6 million from USFS for ~3,000 acres of aerial mulching and point mitigation planning
- \$2.7 million from the CO Water Conservation Board for mulching and point mitigation



# Target Storage Assumptions

- 70% quota from Northern (issued Apr 13)
- GLIC dividends for dry-year
- 2012 water demands
- No pumping of Windy Gap water (collateralize C-BT)
- 2,000 acre-feet of directs unable to be treated due to water quality issues from Cameron Peak fire impacts





# 21,300 AF Target Storage

April 1, 2022 Storage (acre-feet)	
CBT	19,664
Windy Gap	756
GLIC	18,520
Tunnel	518
<b>Total</b>	<b>39,458</b>
Demands (April 1, 2022-March 31, 2023) (acre-feet)	
CBT	12,272
Windy Gap	3,883
GLIC	10,435
Tunnel	1,141
<b>Total</b>	<b>27,730</b>
Yields through April 2023 (acre-feet)	
CBT (Nov. 2022-April 1, 2022)	11,402
Windy Gap	3,450
GLIC	8,767
Tunnel	647
<b>Total</b>	<b>24,266</b>
April 2023 Storage by Source	
CBT	18,794
Windy Gap	324
GLIC	12,852
Tunnel	23
<b>April 2023 Storage</b>	<b>31,994</b>
<b>Target Storage Volume</b>	<b>21,300</b>



# Recommendations

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

