



Colorado Drought in 2020 and 2021

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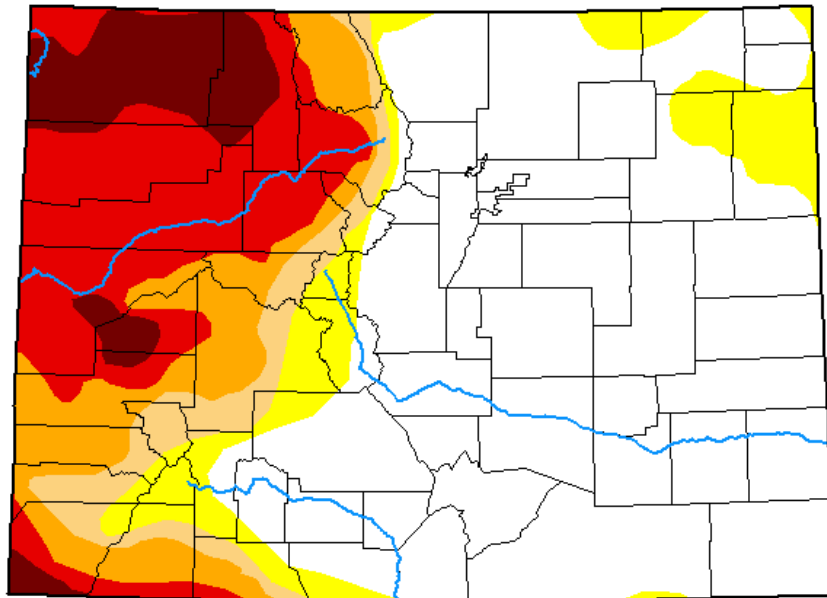


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current U.S. Drought Monitor depiction

U.S. Drought Monitor Colorado

August 3, 2021
(Released Thursday, Aug. 5, 2021)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	56.64	43.36	34.52	29.61	20.96	6.38
Last Week 07-27-2021	56.19	43.81	38.16	32.98	26.82	15.43
3 Months Ago 05-04-2021	7.84	92.16	79.86	51.85	31.01	16.39
Start of Calendar Year 12-29-2020	0.00	100.00	100.00	93.73	76.17	27.60
Start of Water Year 09-29-2020	0.00	100.00	99.29	89.35	52.88	2.64
One Year Ago 08-04-2020	0.00	100.00	85.88	58.79	26.64	0.00

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>

Author:

Richard Tinker
CPC/NOAA/NWS/NCEP



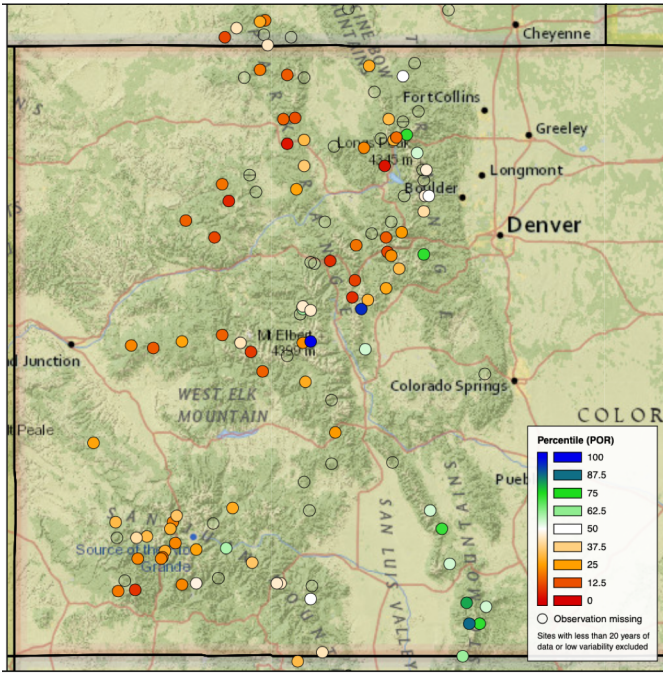
droughtmonitor.unl.edu

- 102 consecutive weeks of a drought category in CO
- 50 consecutive weeks of D4 drought in CO
- 100% of the state in drought for 19 consecutive weeks from Oct 13, 2020 to Feb 16, 2021
- Maximum extent of most severe drought conditions in December 2020 and January 2021

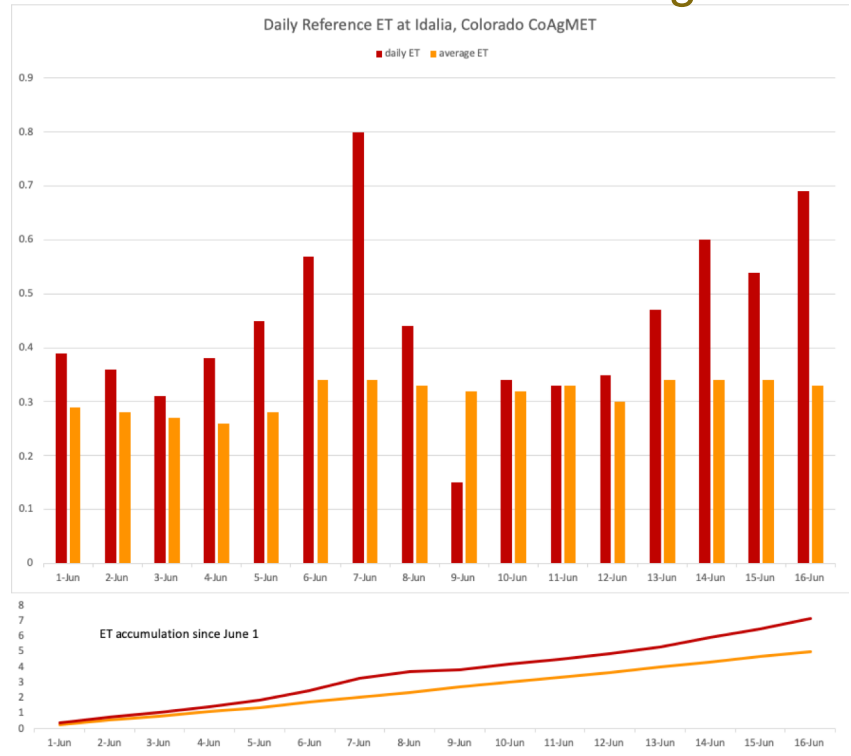


what's contributing to Colorado drought?

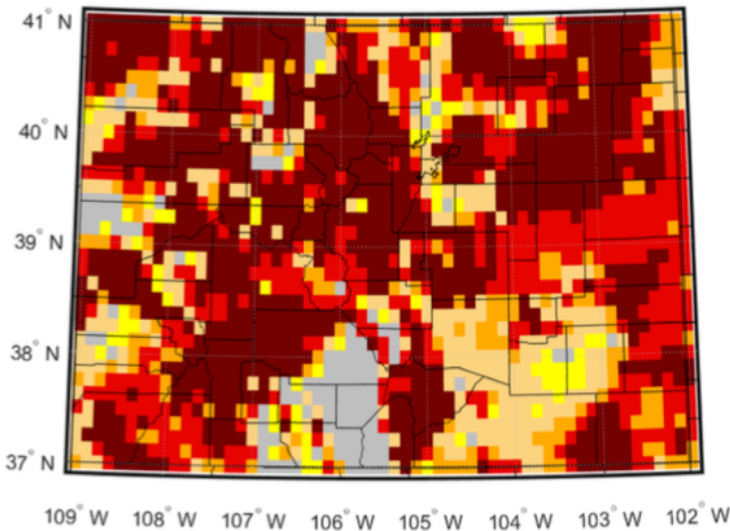
very high evaporative demand
takes more moisture from the ground



low snowpack

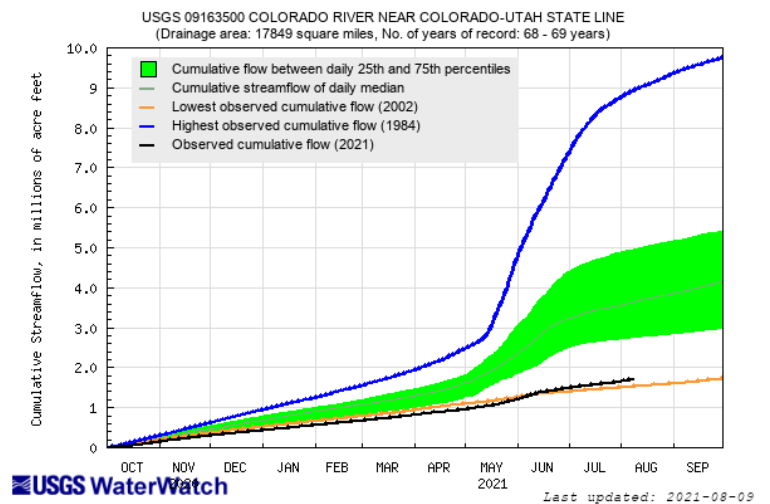


Top Meter Soil Moisture Drought Category
10/28/2020



maroon shows extreme dry soils

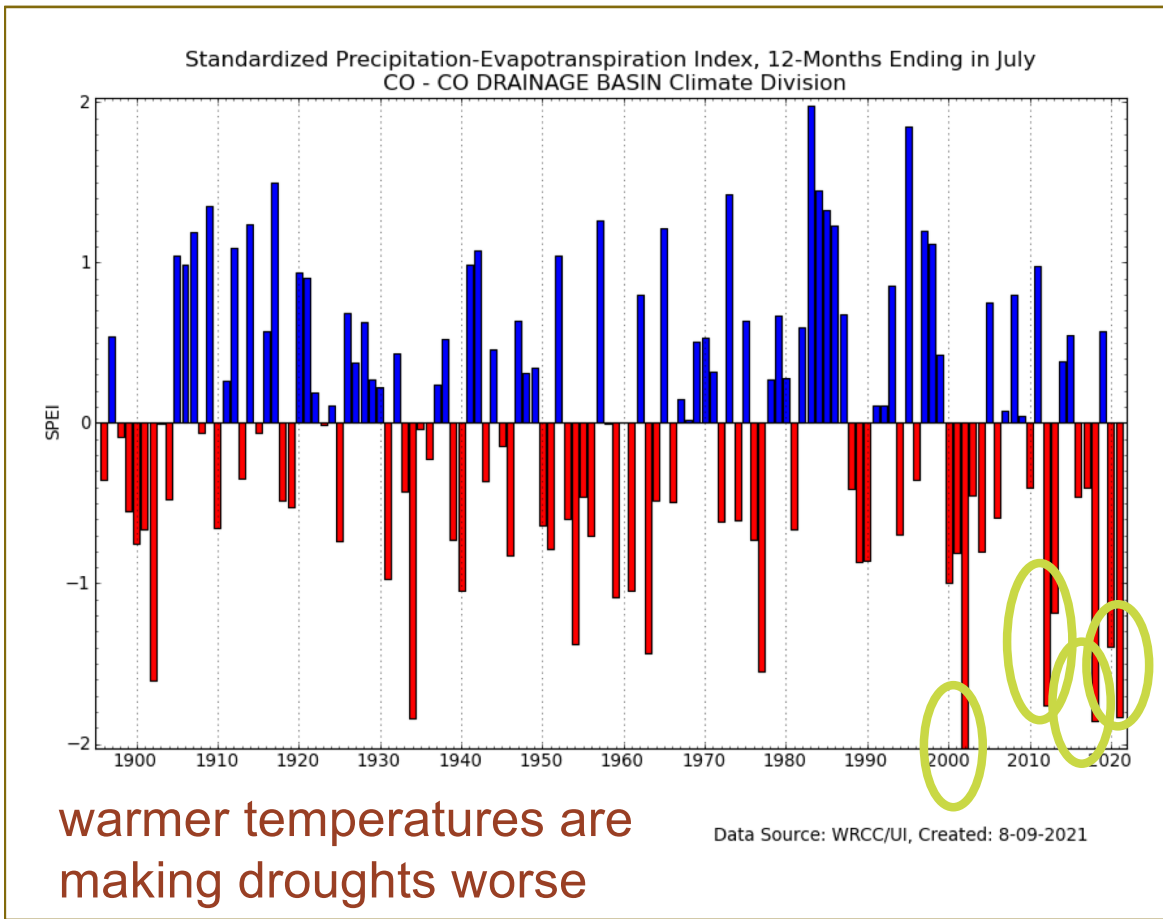
low cumulative flows



Deficits in air, surface, and sub-surface waters have all contributed to Colorado drought in 2020 and 2021.



droughts today and tomorrow



2002
2012-13
2018
2020-21

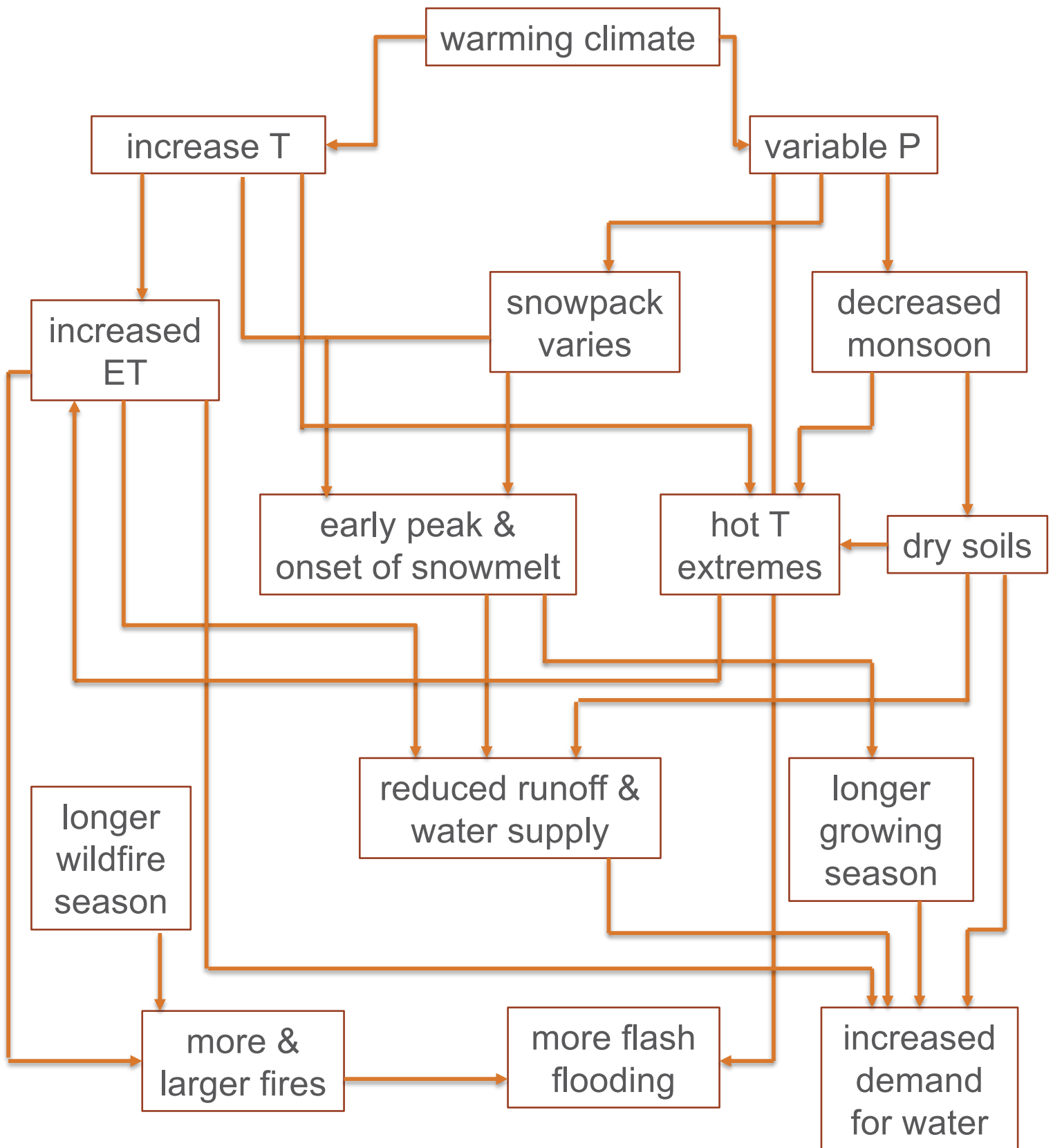
western CO
has been dry
67% of years
in 21st
century

IPCC reports...

- ✓ a 1-in-10 year drought in the 20th century now occurs once every 5 years
- ✓ increases in wildfire activity will continue
- ✓ anticipated decrease in monsoon activity
- ✓ increase in recent drought activity likely due to increases in temperature and evaporative demand

- normal snowpack years can't make up hydrologic deficits from drought years
- temperature is making our droughts more severe
- due to severity and frequency, recovery is more difficult

complicated web of drought and climate



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resources

climate.colostate.edu

find normals, extremes, ENSO status, monthly climate summaries, data, maps, and the latest drought information

cocorahs.org/Maps/conditionmonitoring/
reports of current conditions from volunteers around the country

drought.gov

maps and resources to monitor drought at the national and regional levels

www.ncdc.noaa.gov/cag

NOAA Climate at a Glance – temperature and precipitation from 1895 to present down to the county level



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