

Snowmelt Outlook

for North Central & Northeast Colorado

May 15, 2020

- ❖ Rivers and creeks are not forecast to rise near bankfull in the next week, even with temperatures rising much above normal early next week.
- ❖ Mountain snowmelt alone is not forecast to cause flooding this spring.
- ❖ However, it should be noted that like every spring, an extended period of heavy rainfall falling on top of the snowpack can produce flooding.
- ❖ Also, thunderstorms with heavy rain can produce flash flooding. This on top of the swollen streams from snowmelt, could cause streams to flood.

Factors that may impact the mountain snowmelt:

- Future snowfall
- Stream levels during the melt
- When and how fast the snow melts (freezing and thawing in the mountains)
- Future rainfall amounts and timing
- Whether rain (especially a warm rain) falls on the snowpack
- Soil moisture
- Dry winds

Here are links to current forecasts (graphs) at ‘daily’ Forecast Points:

West of the Divide:

- [Colorado River near Granby](#)
- [Colorado River near Kremmling](#)
- [Fraser River at Winter Park](#)
- [Williams Fork near Parshall](#)
- [Muddy Creek near Kremmling](#)
- [Blue River at Blue River](#)
- [Blue River below Dillon Rsvr](#)
- [Blue River below Green Mtn Rsvr](#)
- [Snake River near Montezuma](#)
- [Tenmile Creek at Frisco](#)
- [Straight Creek near Dillon](#)

East of the Divide:

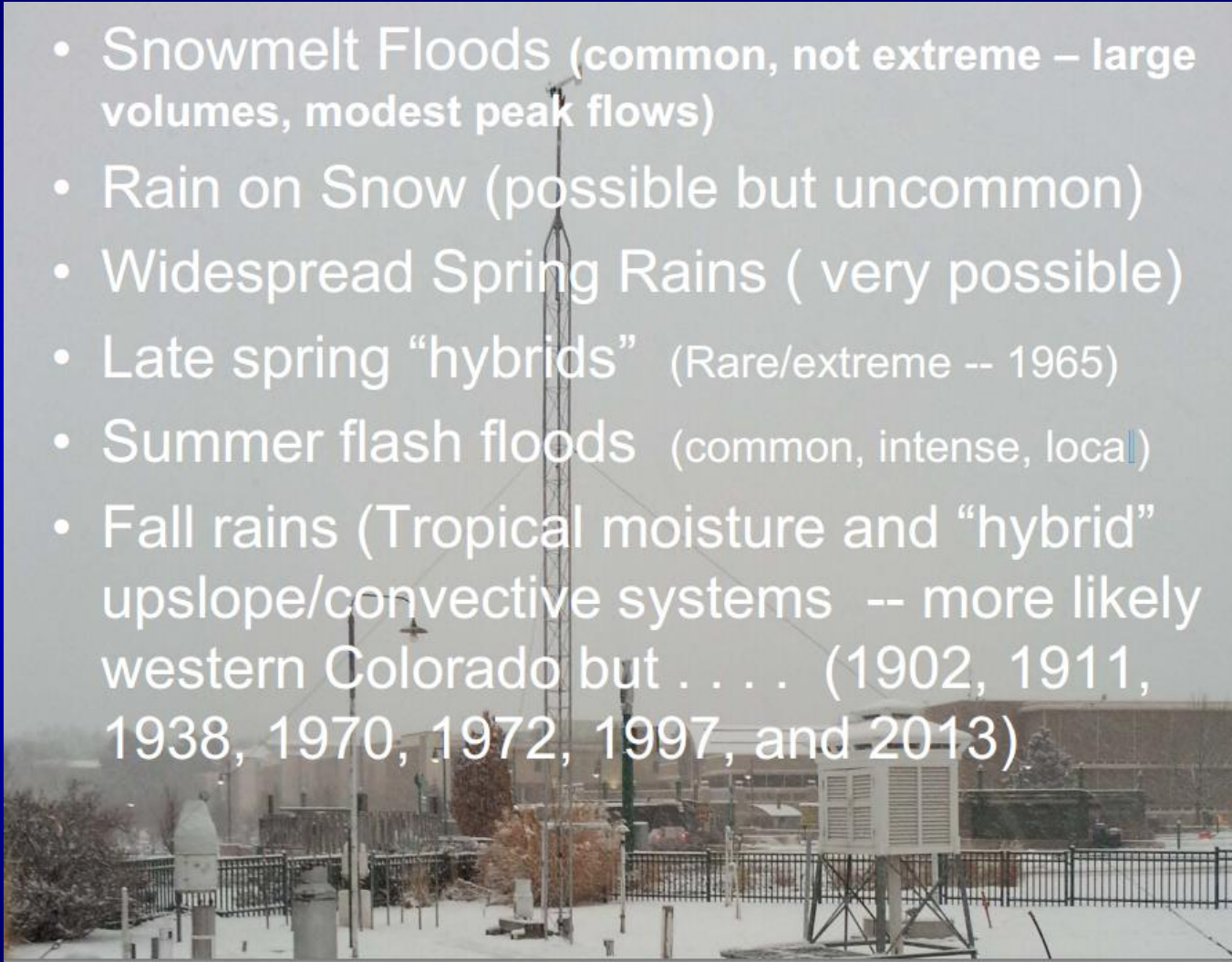
(available daily during the snowmelt runoff)

- [South Platte at South Platte River](#)
- [South Platte River at Denver](#)
- [South Platte River at Kersey](#)
- [Cache la Poudre R. at Canyon Mouth](#)
- [Cache la Poudre R. near Greeley](#)
- [Inflow into Lake Estes at Estes Park](#)
- [North Fork Big Thompson R. at Drake](#)
- [Clear Creek at Golden](#)

- **Forecasts are issued as needed at other Forecast Points during times of high water, but are not routinely available. All forecasts are available on our AHPS webpage at <https://water.weather.gov/ahps2/forecasts.php?wfo=bou>**
- **Additional river gage observations are available (courtesy of the gage owners) at <https://water.weather.gov/ahps2/index.php?wfo=bou>**

“Colorado floods come in several flavors”, is from Nolan Doeskin. His slide below presents an overview of flood potential in Colorado.

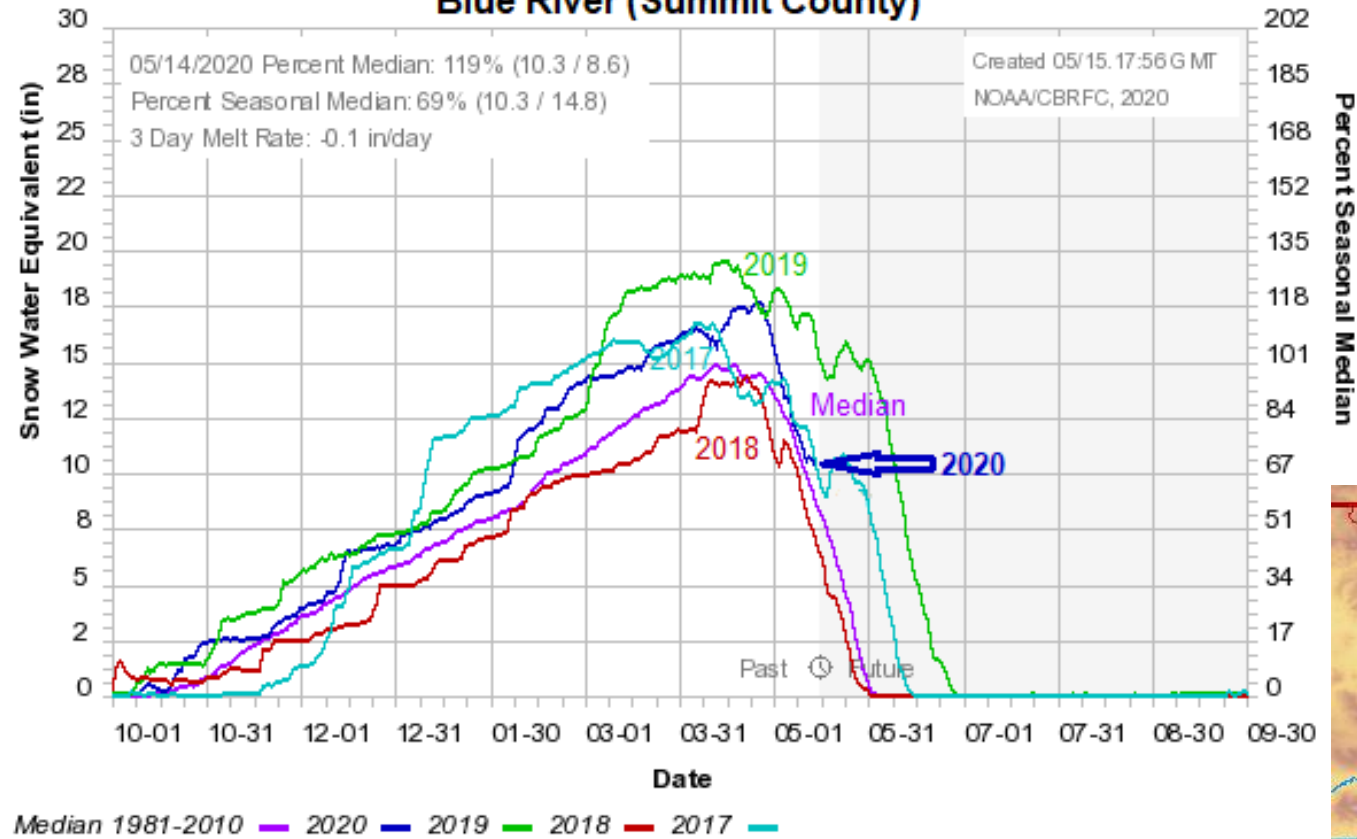
- Snowmelt Floods (common, not extreme – large volumes, modest peak flows)
- Rain on Snow (possible but uncommon)
- Widespread Spring Rains (very possible)
- Late spring “hybrids” (Rare/extreme -- 1965)
- Summer flash floods (common, intense, local)
- Fall rains (Tropical moisture and “hybrid” upslope/convective systems -- more likely western Colorado but (1902, 1911, 1938, 1970, 1972, 1997, and 2013)



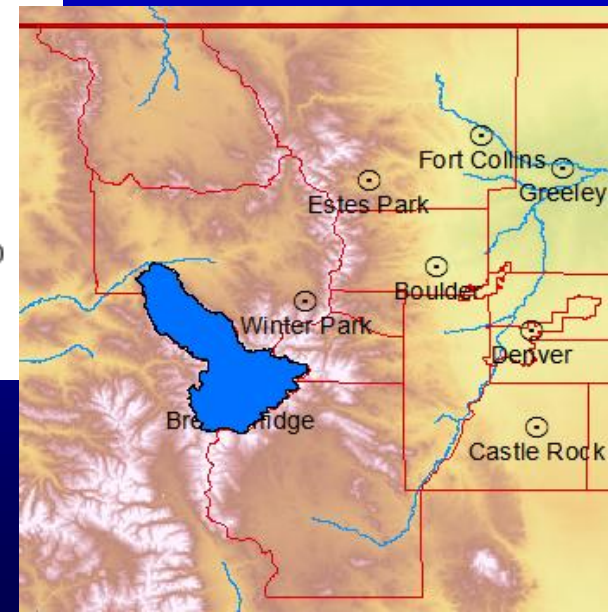
The remaining slides show mountain snowpack timeseries graphs for sub-basins the past 4 years (each line is a water year October - September)

Blue River

Colorado Basin River Forecast Center
Blue River (Summit County)

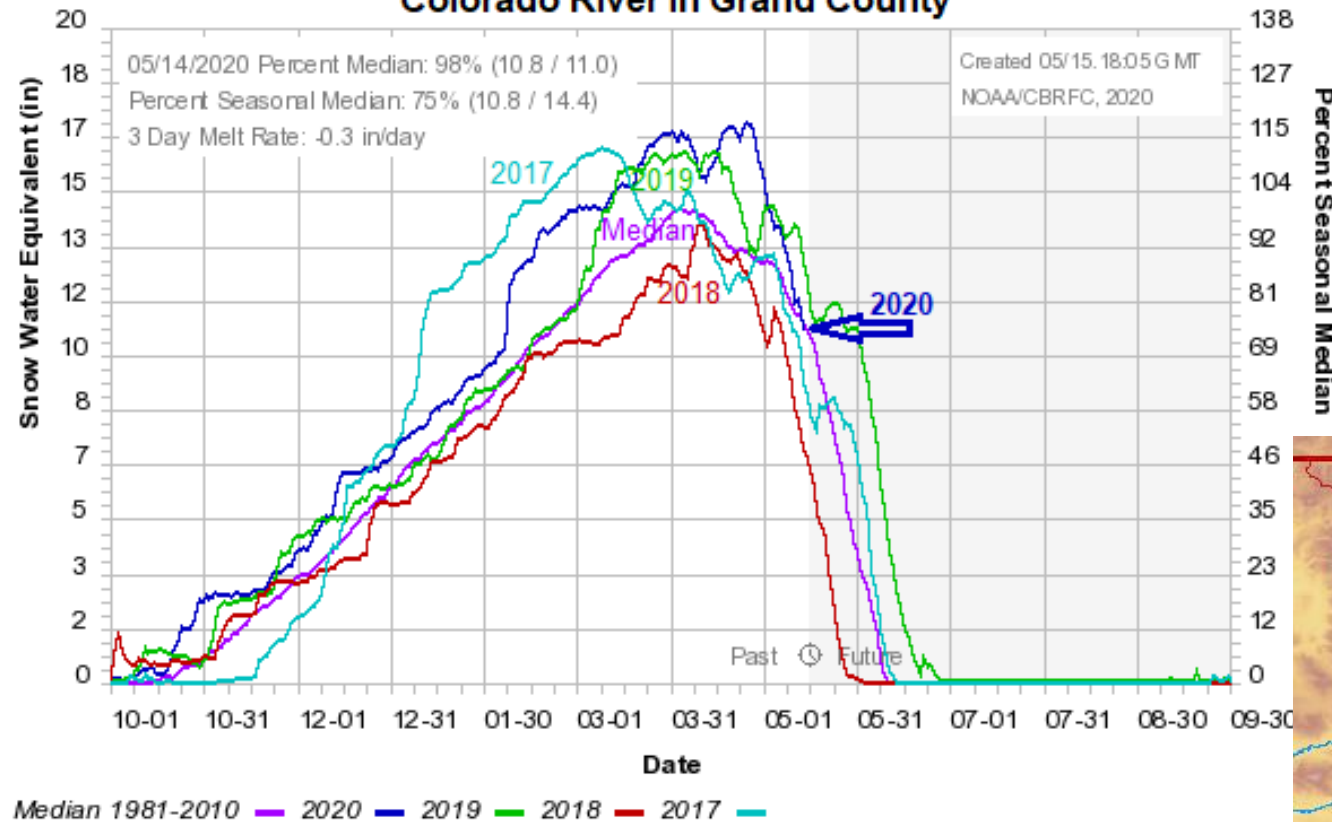


Summit County

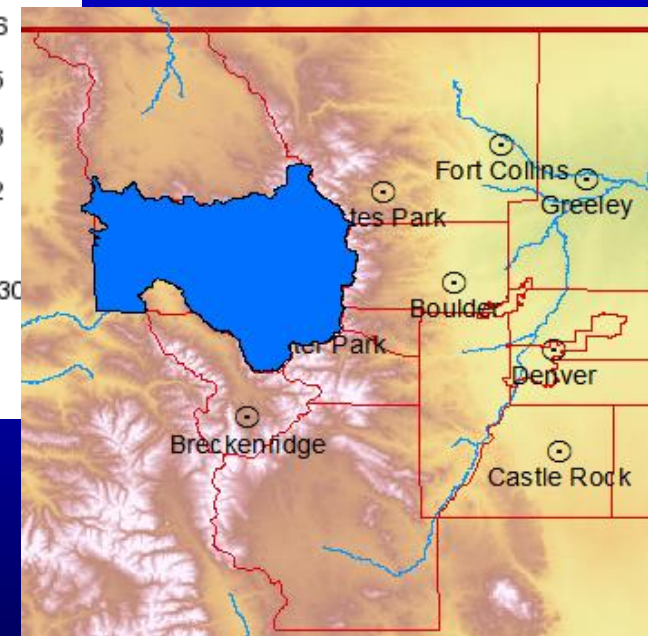


Colorado River

Colorado Basin River Forecast Center Colorado River in Grand County



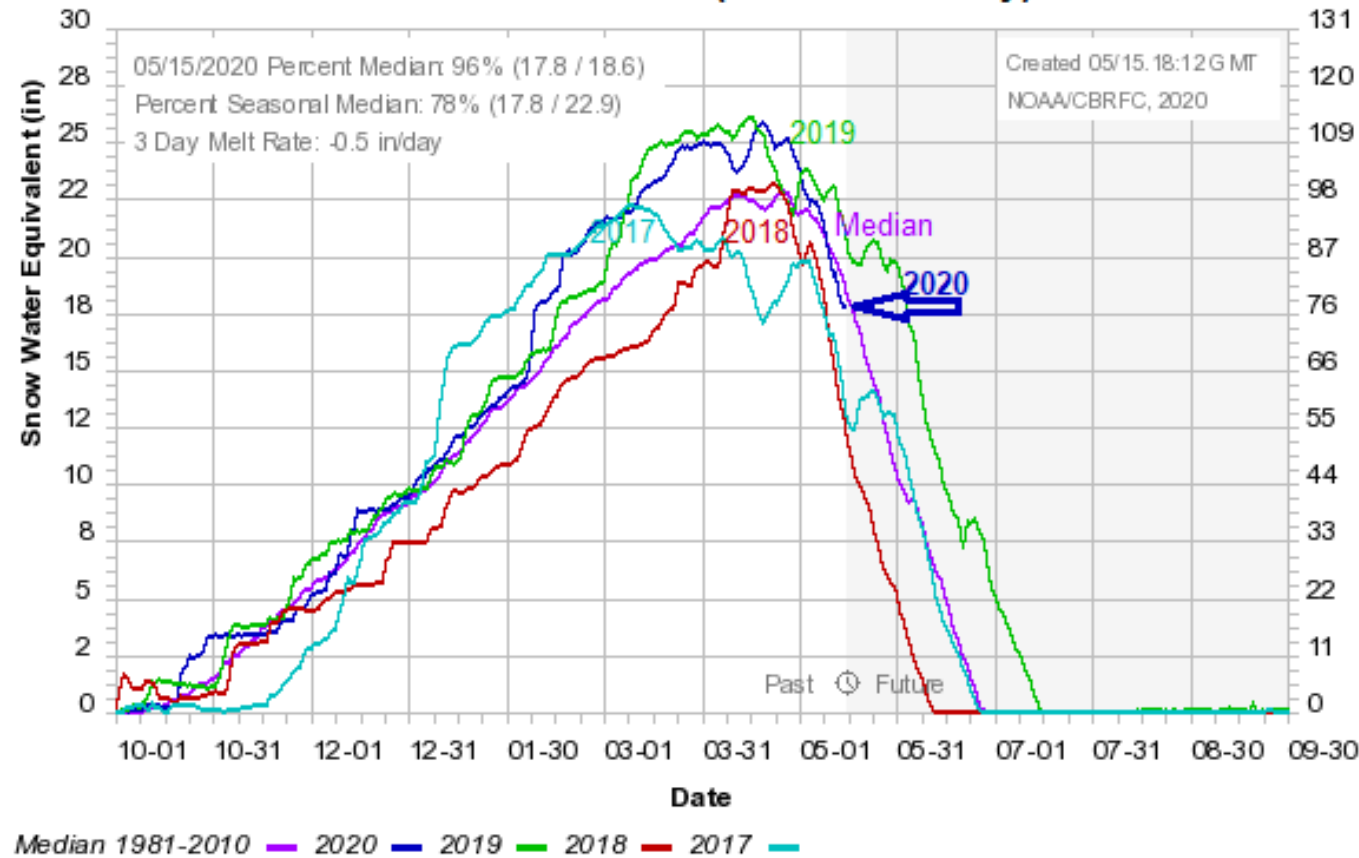
Grand County



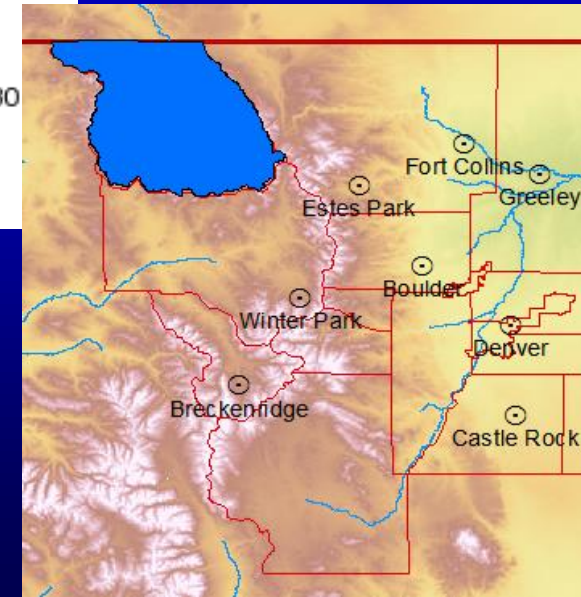
[Additional time series graphs can be produced on the Colorado Basin RFC website at:](http://www.cbrfc.noaa.gov/station/sweplot/snowgroup.php)
<http://www.cbrfc.noaa.gov/station/sweplot/snowgroup.php>

North Platte River

North Platte River (Jackson County)

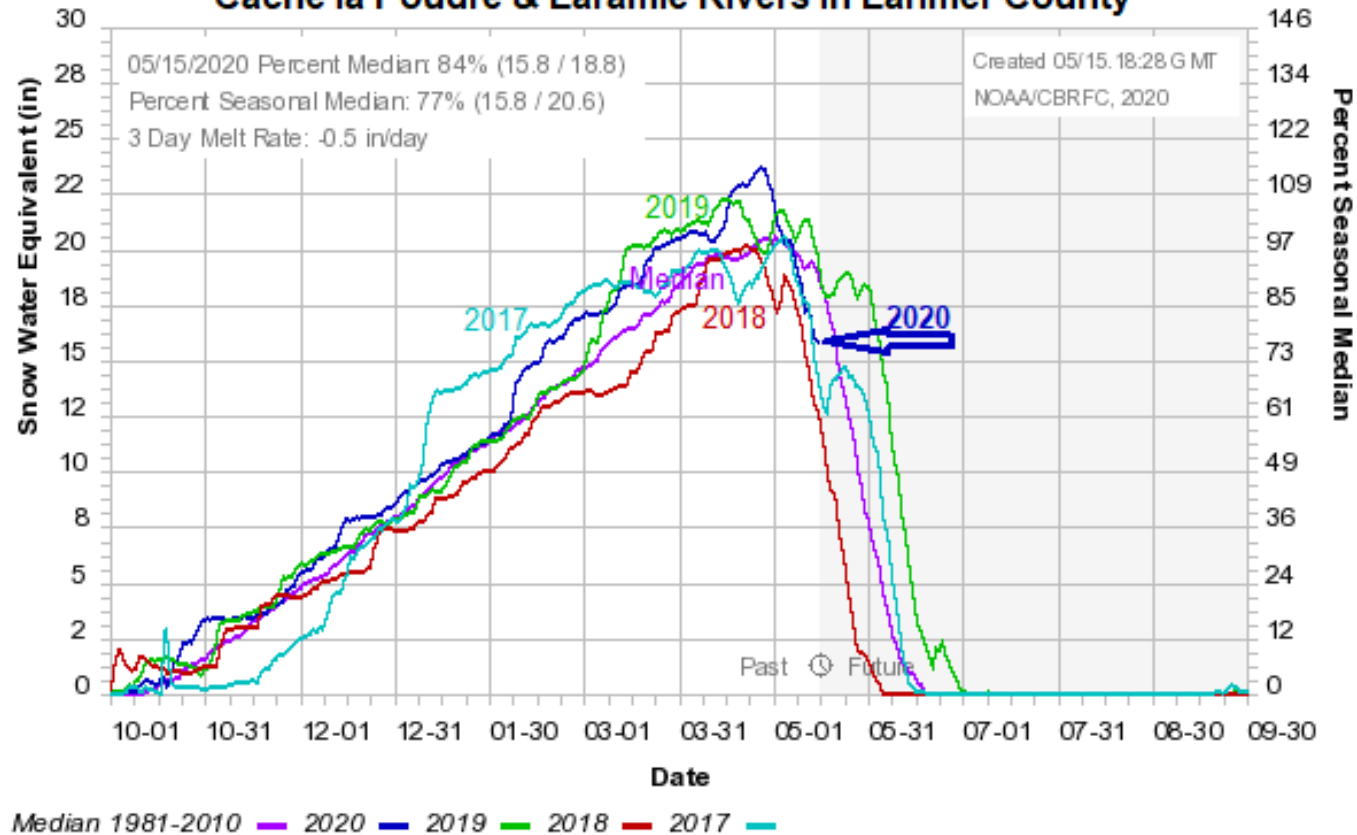


Jackson County

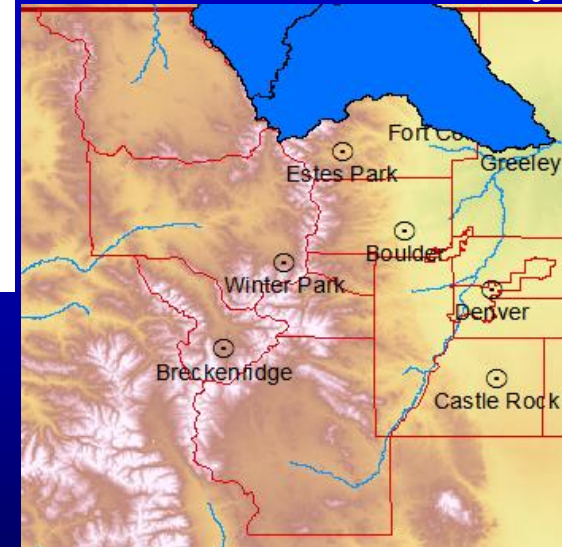


Cache la Poudre & Laramie Rivers

Cache la Poudre & Laramie Rivers in Larimer County

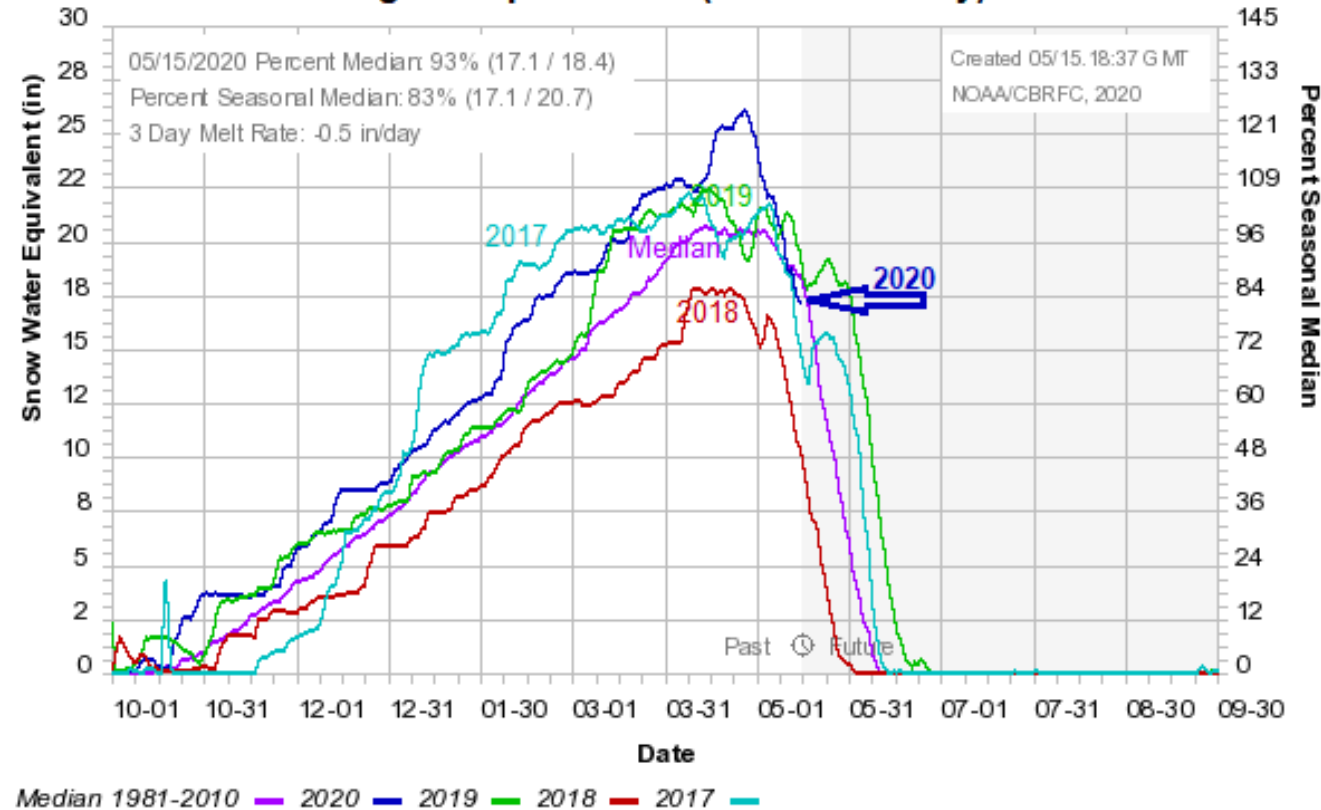


northern Larimer County

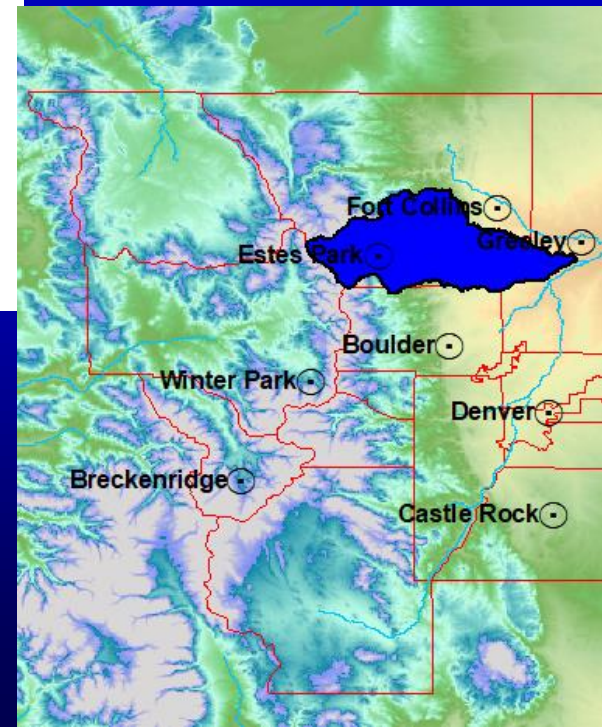


Big Thompson River

Big Thompson River (Larimer County)

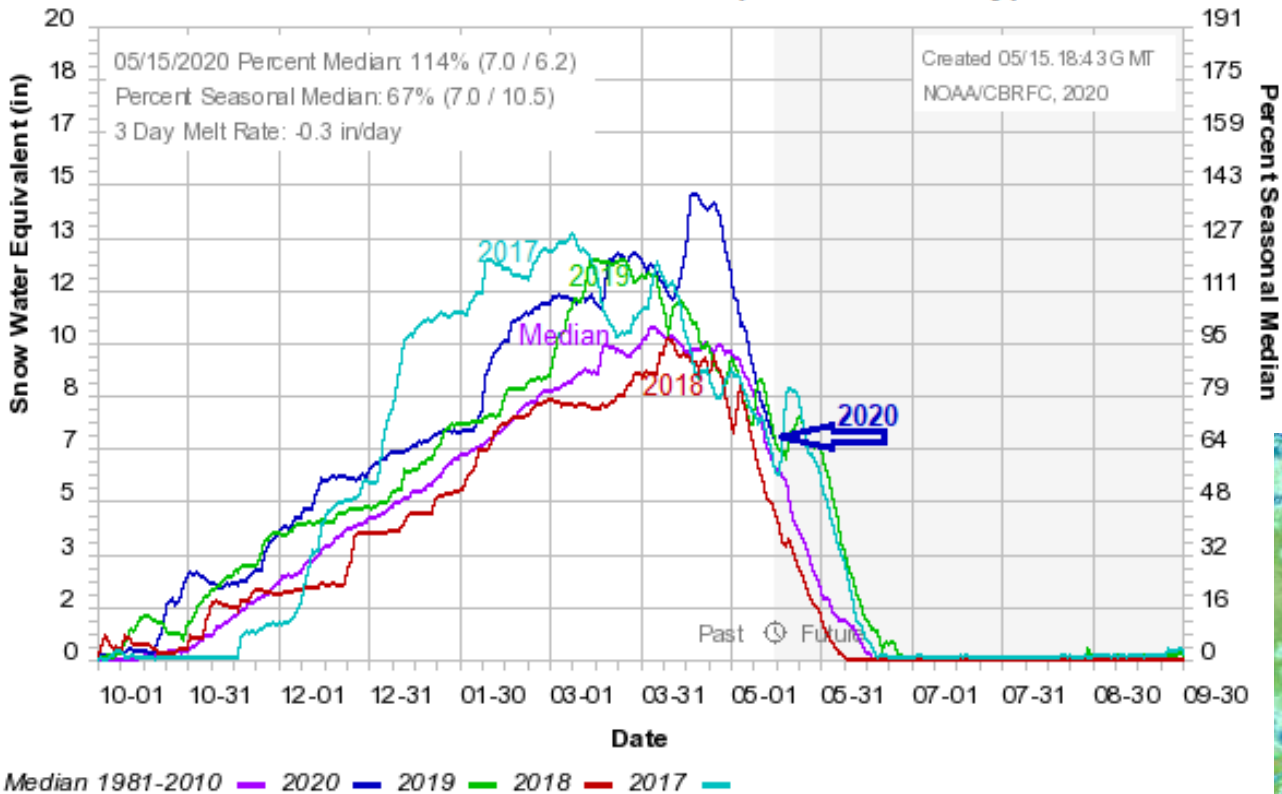


southern Larimer County



Boulder & Saint Vrain Creeks

Boulder & Saint Vrain Creeks (Boulder County)

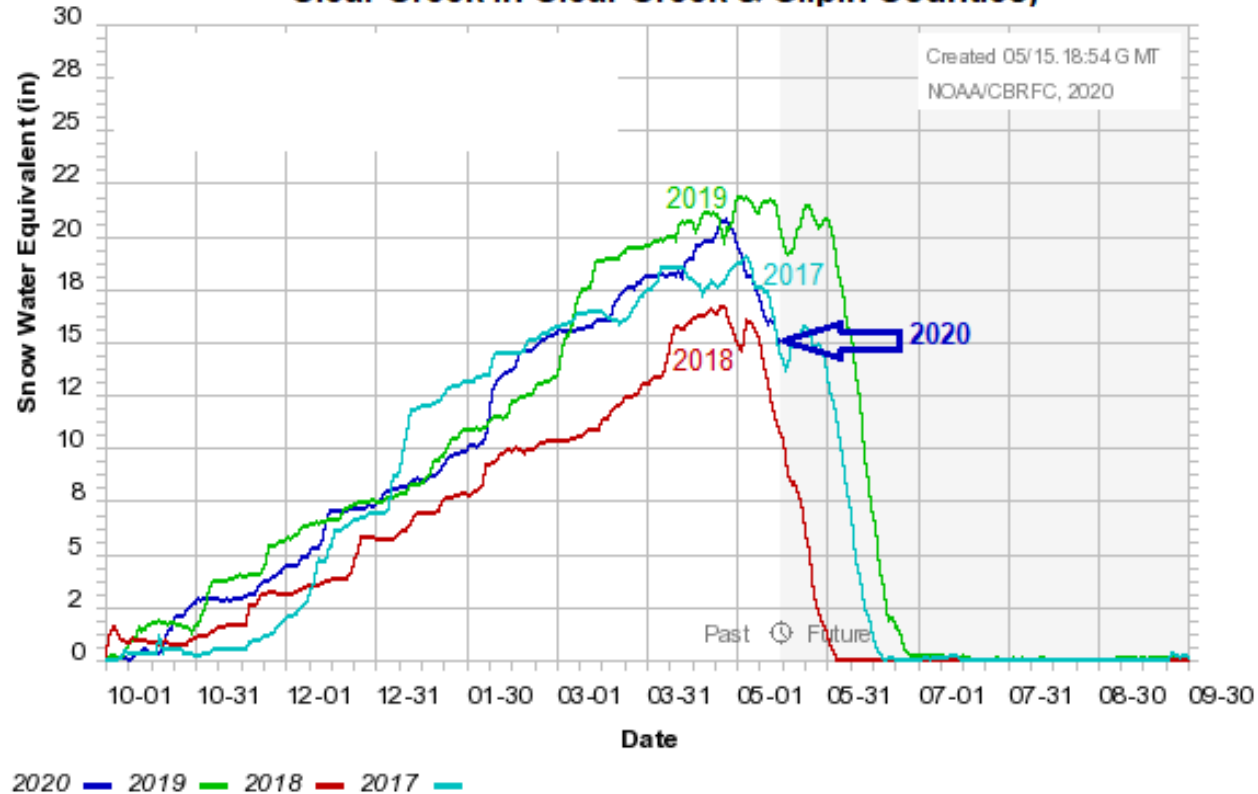


Boulder County



Clear Creek

Clear Creek in Clear Creek & Gilpin Counties)

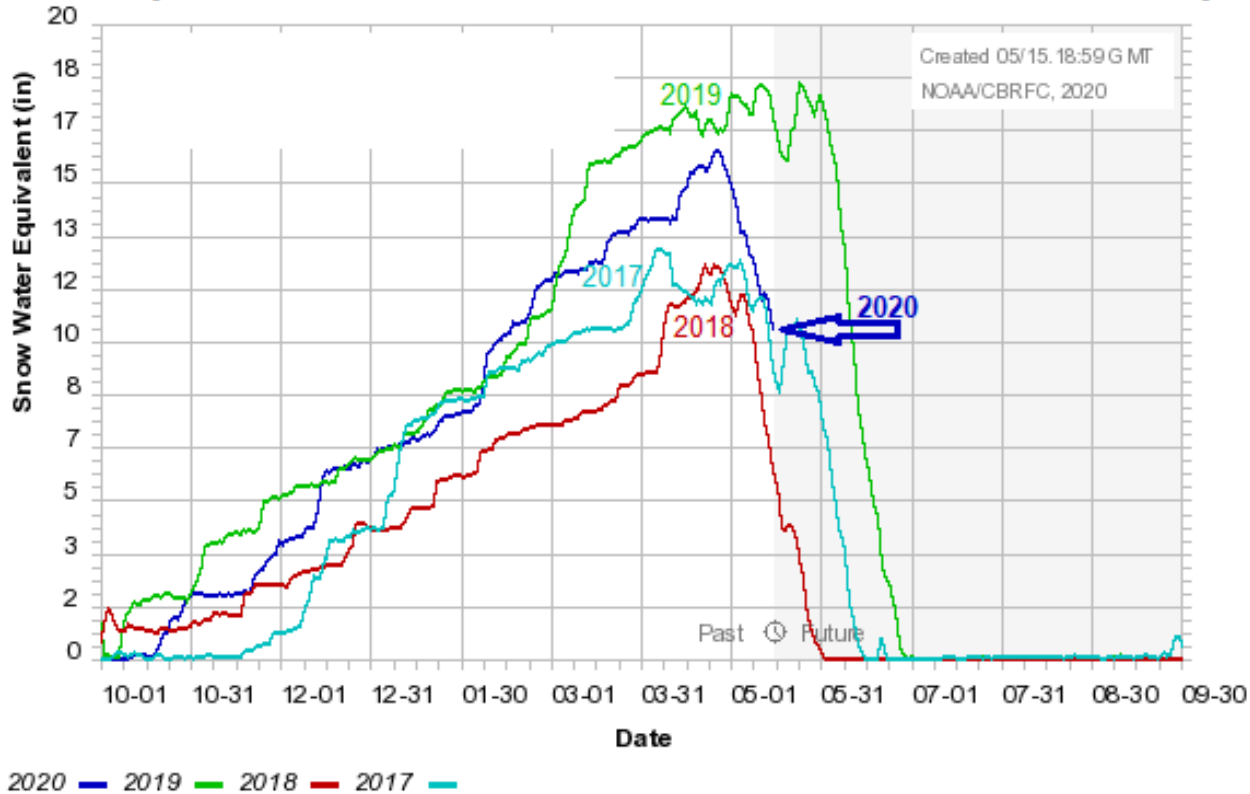


Gilpin & Clear Ck Counties



Tarryall Creek & South Platte River headwaters

Tarryall Creek & headwaters of the South Platte River in Park County



Park County



[NRCS Time Series Snowpack Graphs of the major Colorado river basins are available at:](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/co/snow/products/?cid=nrcs144p2_063323)
http://www.nrcs.usda.gov/wps/portal/nrcs/detail/co/snow/products/?cid=nrcs144p2_063323