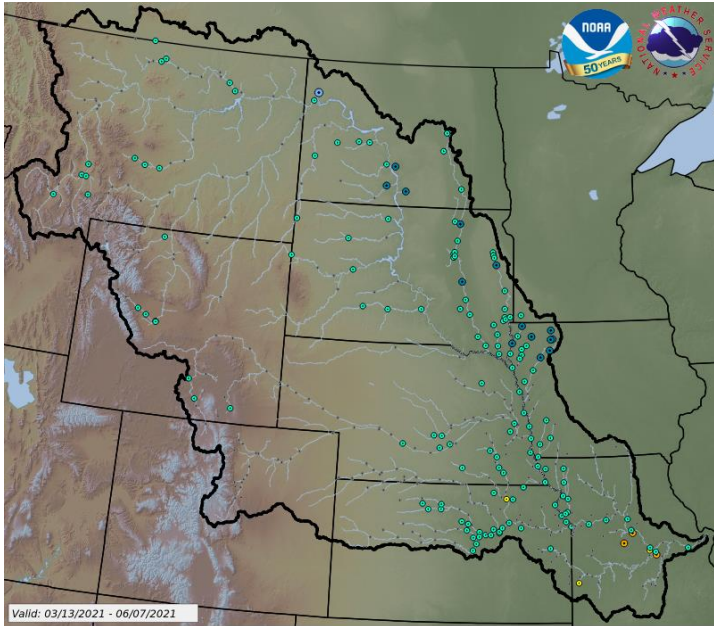


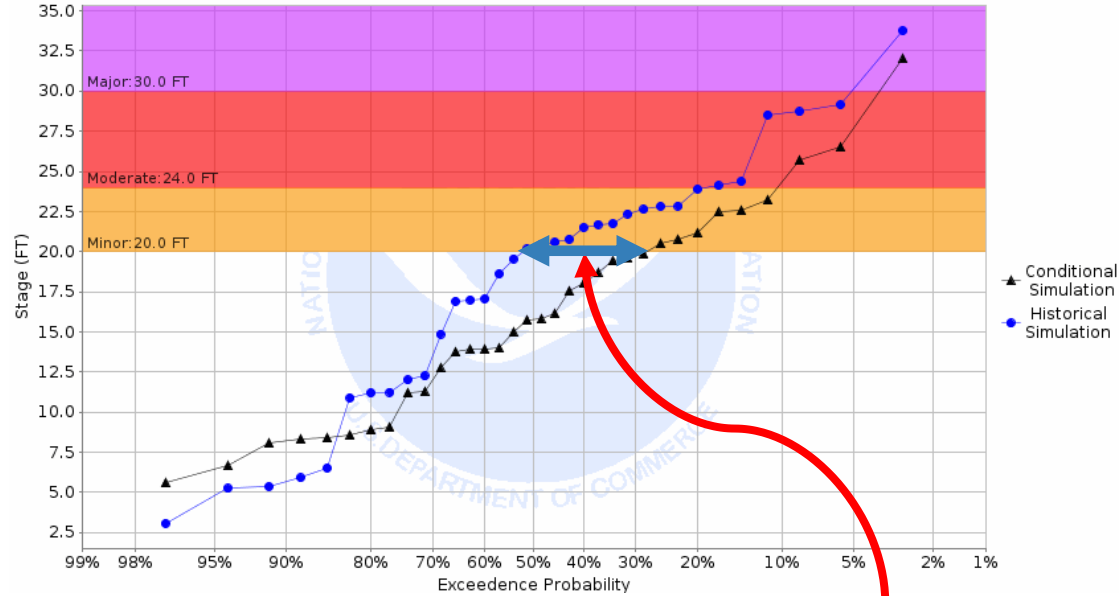
MISSOURI BASIN: CHANCE OF REACHING FLOOD STAGE IN 2021 AS COMPARED TO HISTORICAL



Percent Difference of Reaching Minor Flooding Compared to Historical Average

- -100% to -70%
- -29% to -10%
- 30% to 49%
- -69% to -50%
- -9% to 9%
- 50% to 69%
- -49% to -30%
- 10% to 29%
- 70% to 100%

Chance of Exceeding River Stage on the MISSOURI R at LEAVENWORTH KS
Forecast for the period 03/13/2021 - 06/11/2021
This is a conditional simulation based on the current conditions as of 03/08/2021

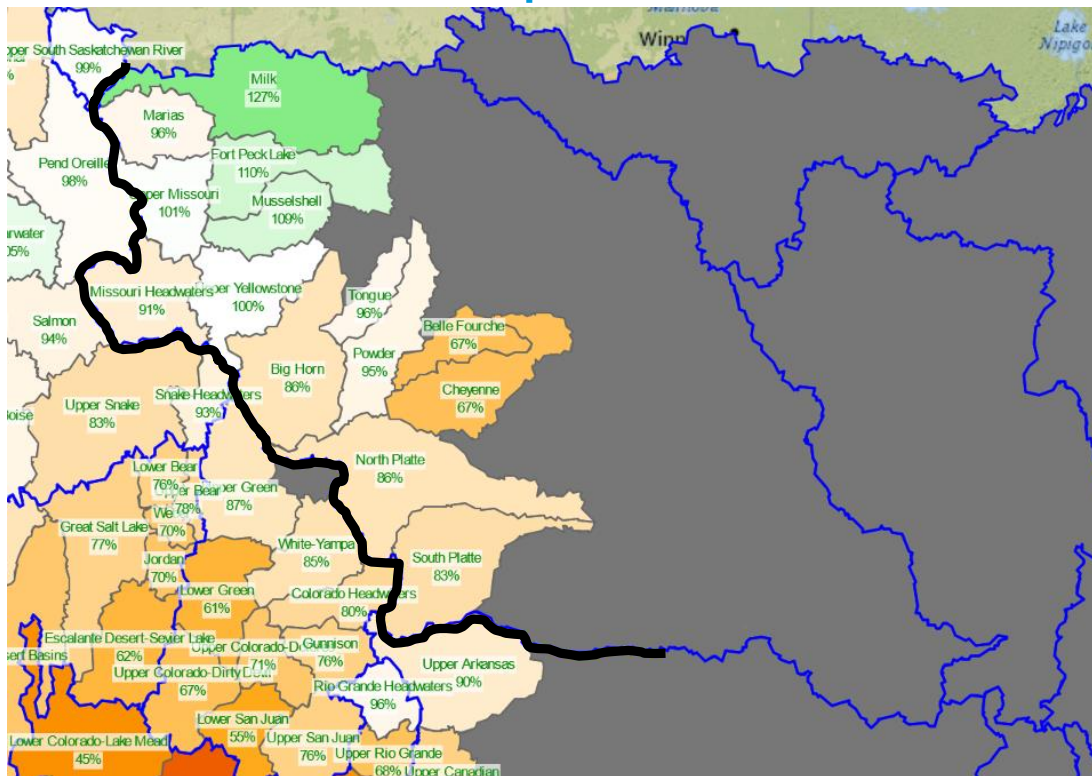


**24 percent decrease in chance to reach flood stage
(as compared to normal) during next 3 months**



MISSOURI BASIN:

Mountain Snowpack As of 10 March 2021

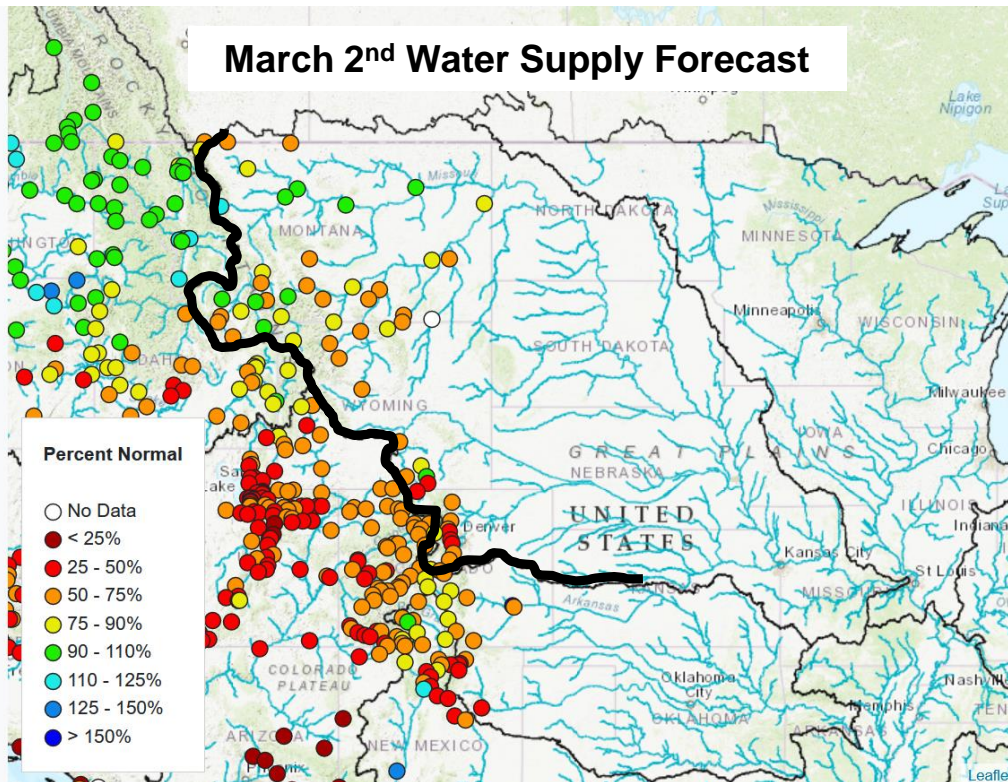


Mountain snowpack running near average in the north, to below average south.

MISSOURI BASIN:

Mountain Runoff Volume April-September

March 2nd Water Supply Forecast



Mountain runoff volume projected to be below normal

- **Milk:** 55%
- **Upper Missouri abv Ft. Peck:** 93%
- **Yellowstone:** 77%
- **North Platte:** 59%
- **South Platte:** 61%



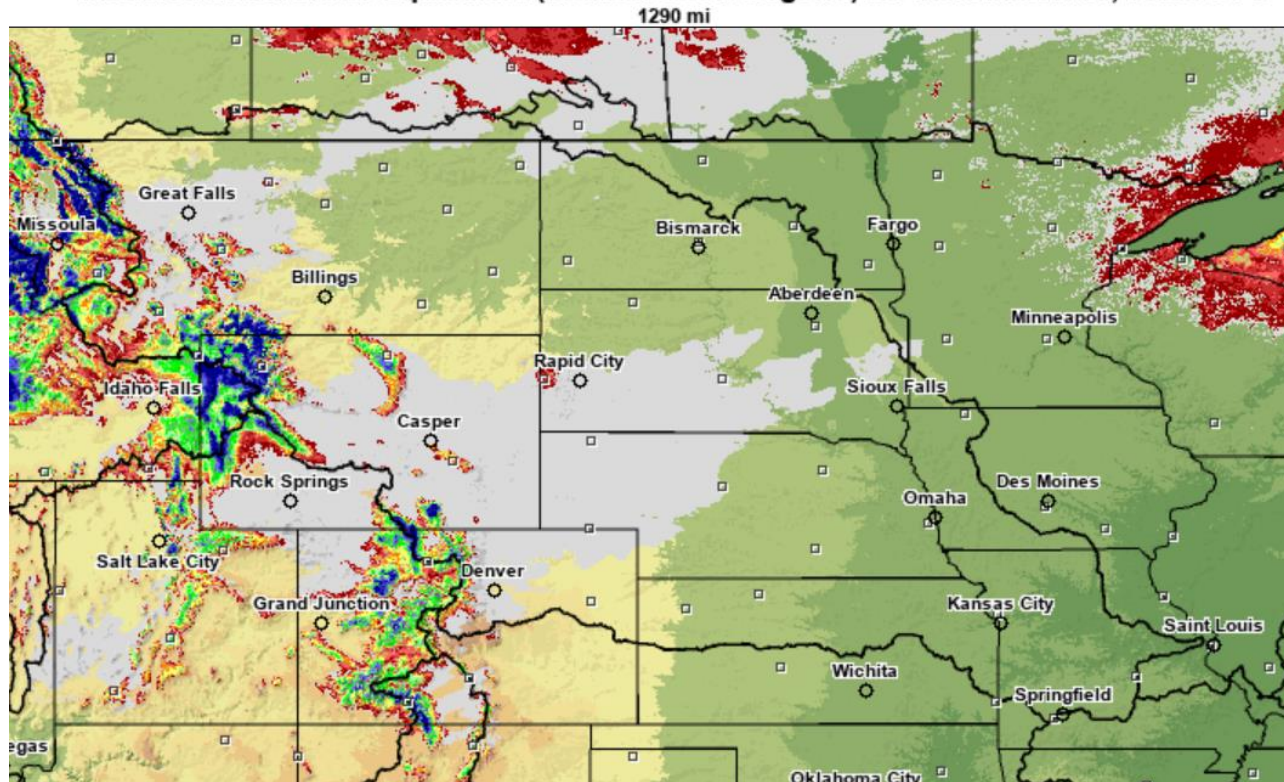
Issued by the Missouri Basin
River Forecast Center



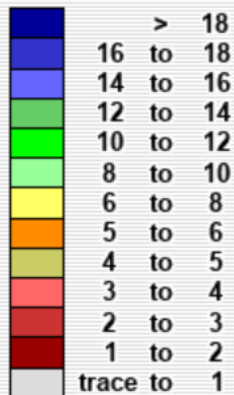
NATIONAL WEATHER SERVICE

MISSOURI BASIN: Plains Snowpack as of 10 March 2021

Modeled Snow Water Equivalent (Shallow-snow Legend) for 2021 March 10, 16:00 UTC



Inches of water equivalent



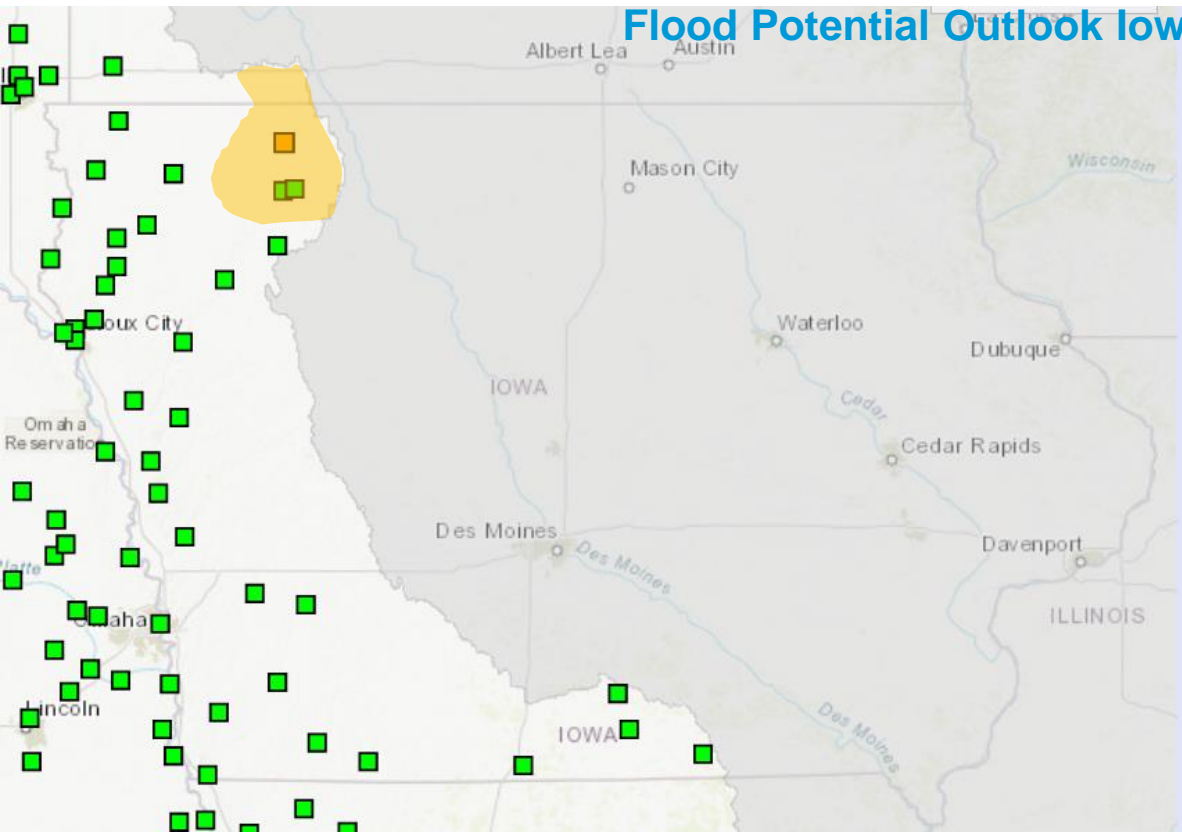
Not Estimated

Elevation in feet



MISSOURI BASIN: Flood Potential Outlook Iowa

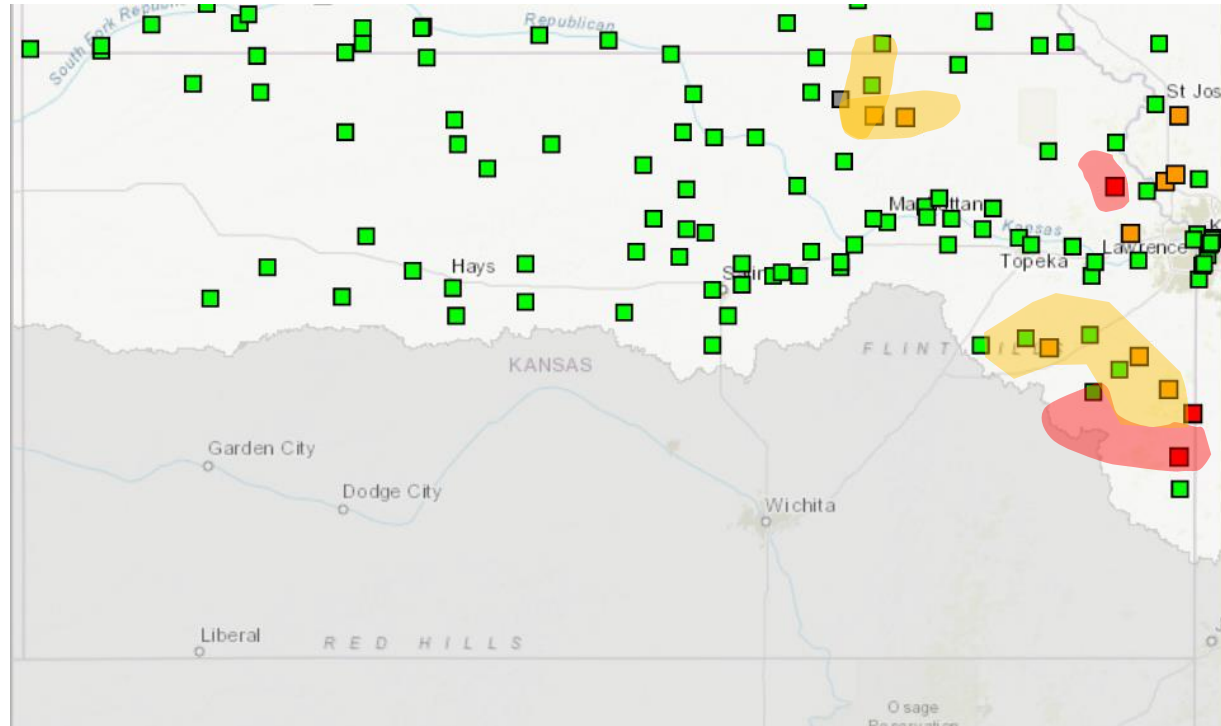
Flood Potential Outlook Iowa



Little Sioux River: minor



MISSOURI BASIN: Flood Potential Outlook Kansas



Big Blue River: minor

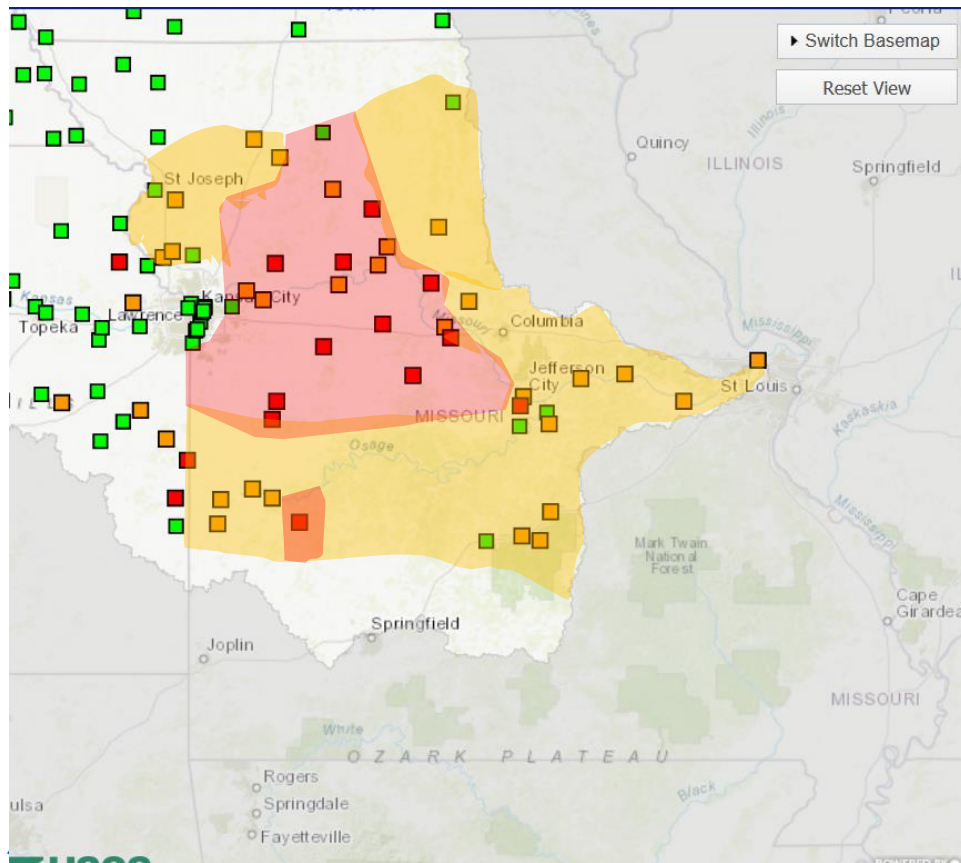
Black Vermillion: minor

Stranger Creek: moderate

Marais des Cygnes: minor

Little Osage R: moderate

MISSOURI BASIN: Flood Potential Outlook Missouri



Grand River: moderate

Crooked River: moderate

Blackwater R: moderate

Lamine River: moderate

South Grand R: moderate

Big Creek: moderate

Wakenda Creek: moderate

Petite Saline Ck: moderate

Moreau River: moderate

Sac River: moderate

Chariton River: minor

Moniteau Creek: minor

Marmaton R: minor

Big Piney River: minor

Gasconade River: minor

Little Osage R: minor

Osage River: minor

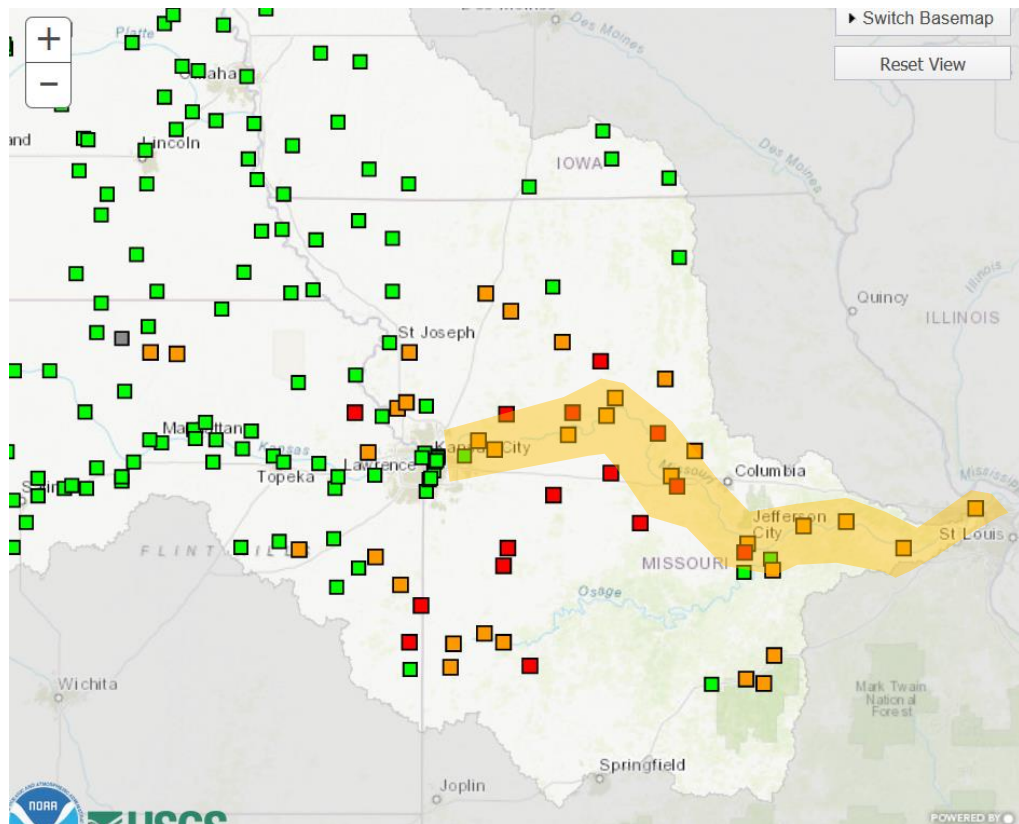
Platte River: minor

Maries River: minor

Roubidoux Ck: minor

MISSOURI BASIN:

Flood Potential Outlook: Missouri River Below Gavins to St. Louis



**Minor flooding expected
downstream of Kansas City**

MISSOURI BASIN:

Flood Potential Outlook: Summary Points

- Overall, Spring Flood Risk is lower than normal.
- Mountain snowpack is average-to-below average this year. We still have roughly 20% of snow accumulating period remaining.
- Plains snowpack is negligible.
- Soils very dry over most of the basin. Ground remains porous.
- River ice concerns are diminishing.
- Significant flooding due to mountain snow runoff alone is not likely.
- Episodic minor-to-moderate level flooding likely in the lower portion of the basin (southeastern NE, eastern KS, southern IA, MO) due to Spring-time thunderstorm activity. This is typical.

