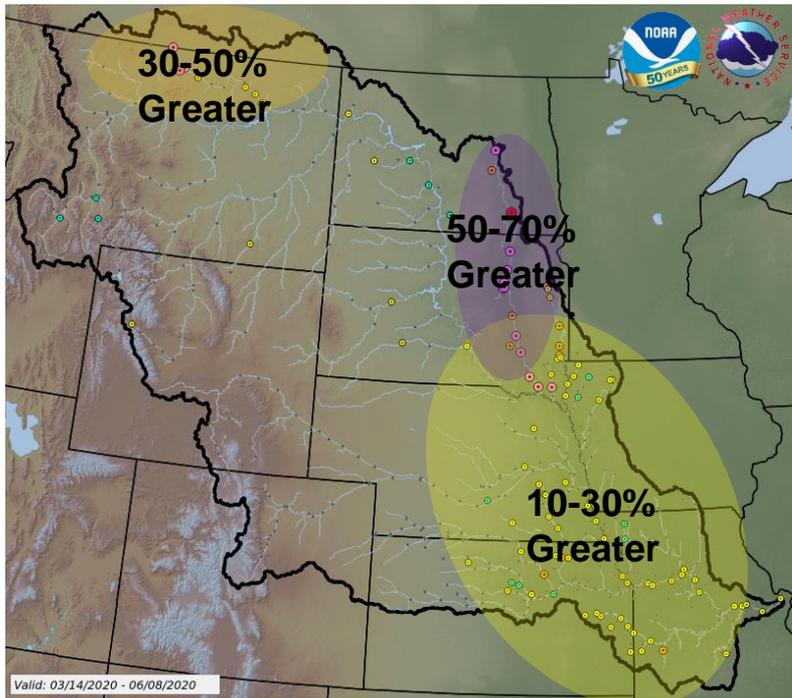
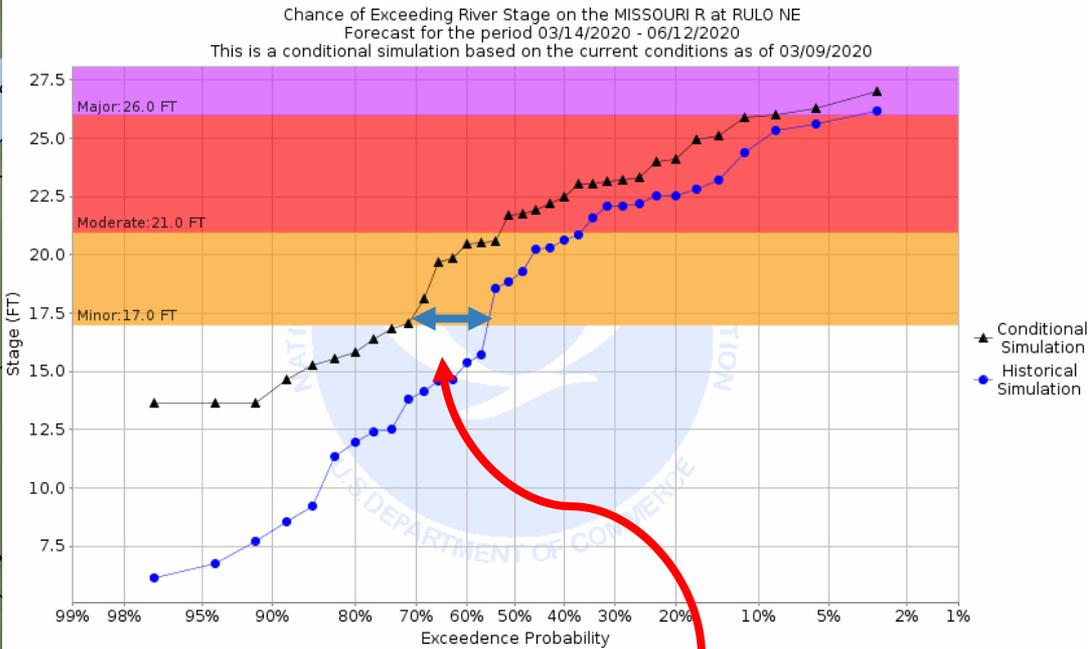


# MISSOURI BASIN: CHANCE OF REACHING FLOOD STAGE IN 2020 AS COMPARED TO HISTORICAL



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%



**16 percent increase in chance to reach flood stage during next 3 months**





# MISSOURI BASIN:

## Mountain Runoff Volume April-September

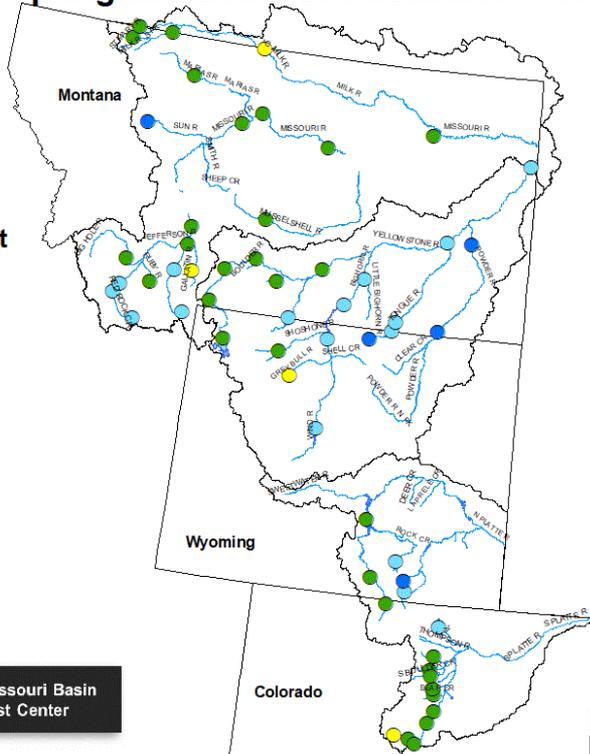
### March 2020 Spring and Summer Streamflow Forecast

Forecast as Percent  
of 1980-2010  
Historical Average

- > 180%
- 150% - 180%
- 130% - 149%
- 110% - 129%
- 90% - 109%
- 70% - 89%
- 50% - 69%
- 25% - 49%
- < 25%



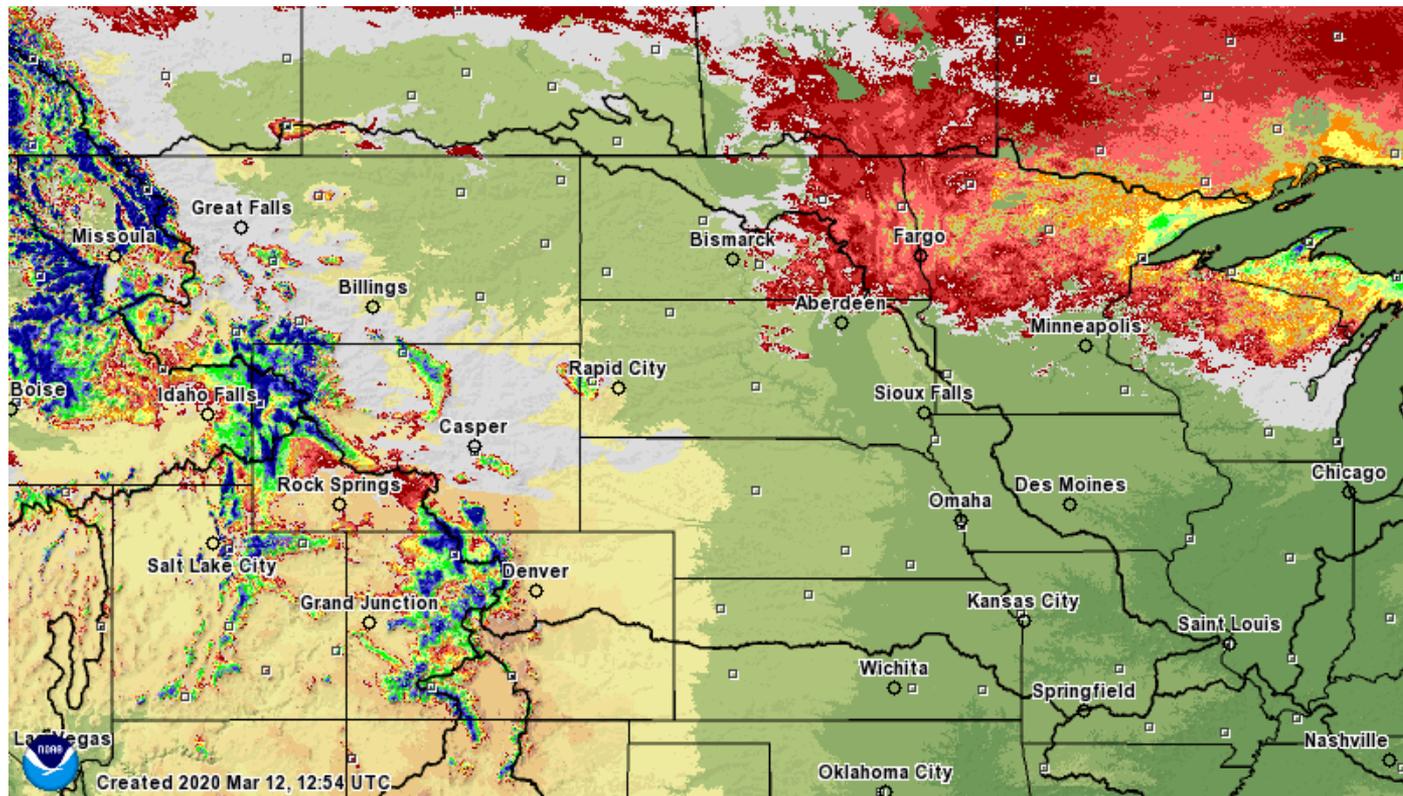
Issued by the Missouri Basin  
River Forecast Center



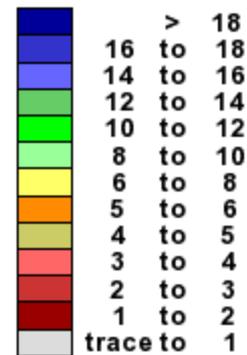
Mountain runoff volume projected to be near normal

- **Upper Missouri abv Ft. Peck: 108%**
- **Yellowstone: 114%**
- **North Platte: 102%**
- **South Platte: 103%**

# MISSOURI BASIN: Plains Snowpack as of 12 March 2020



Inches of water equivalent

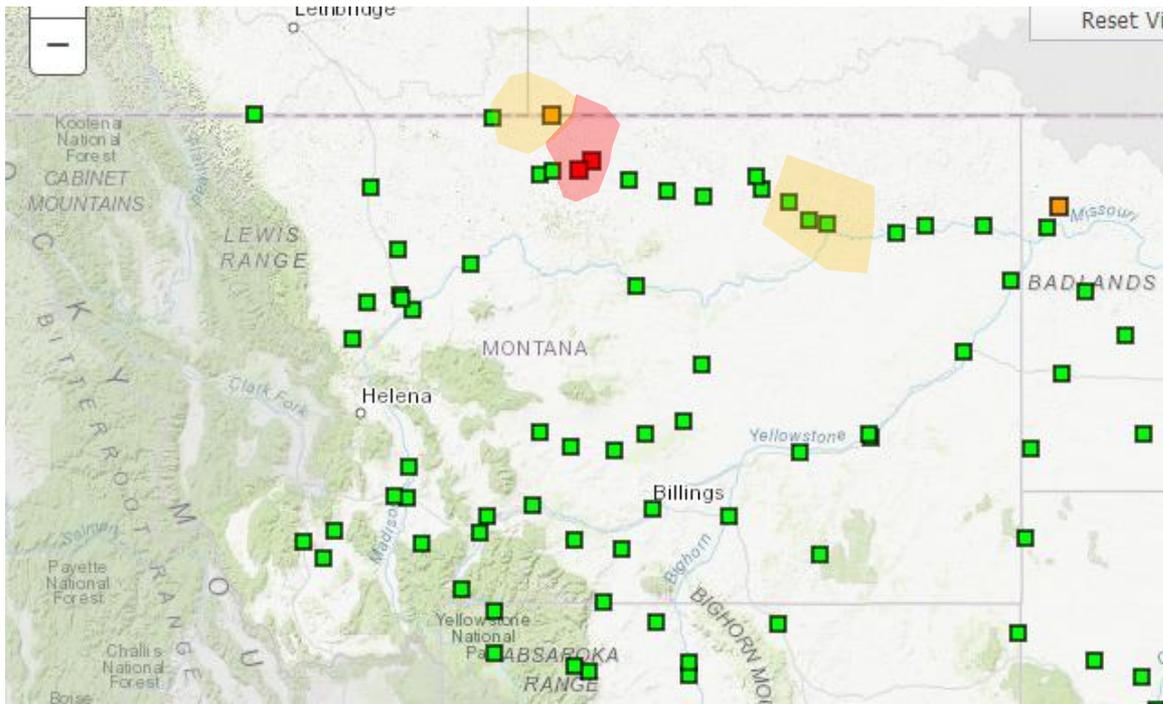


Not Estimated

Elevation in feet



# MISSOURI BASIN: Flood Potential Outlook Montana



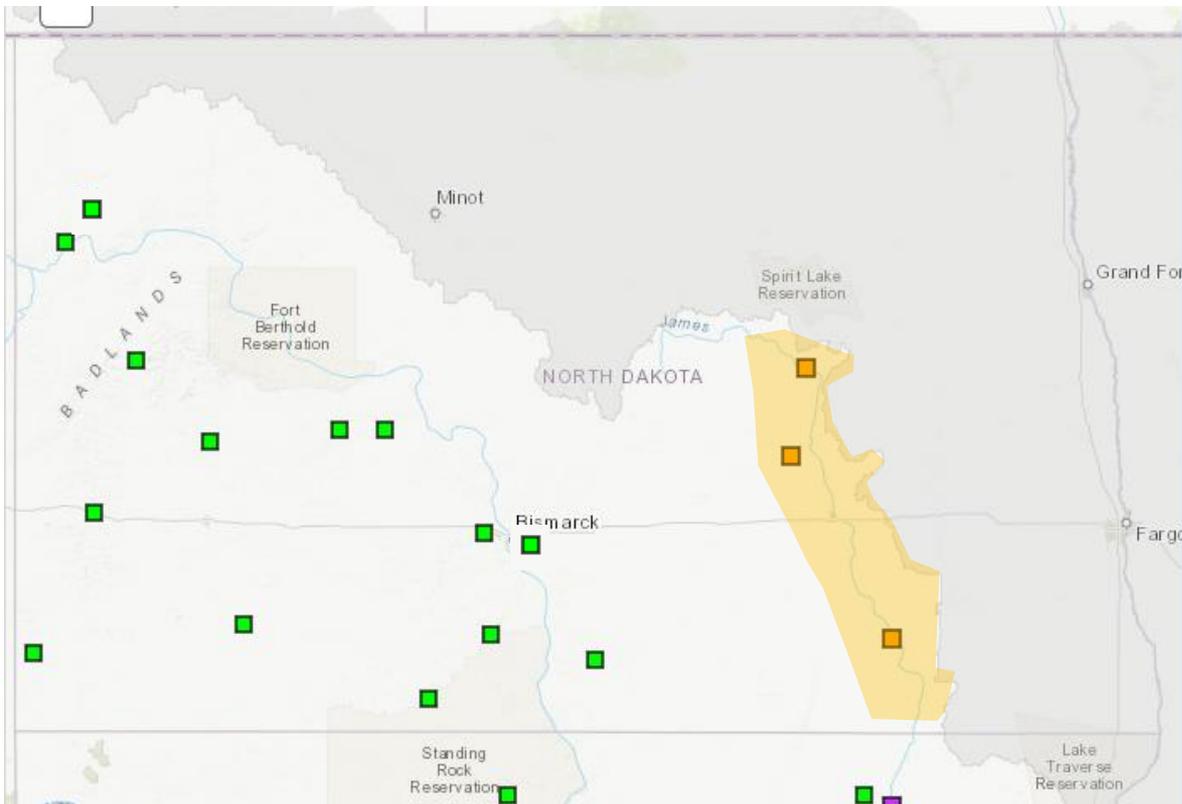
**Battle Creek: Moderate**

**Clear Creek: Moderate**

**Lodge Creek: Minor**

**Milk River: Minor**

# MISSOURI BASIN: Flood Potential Outlook North Dakota

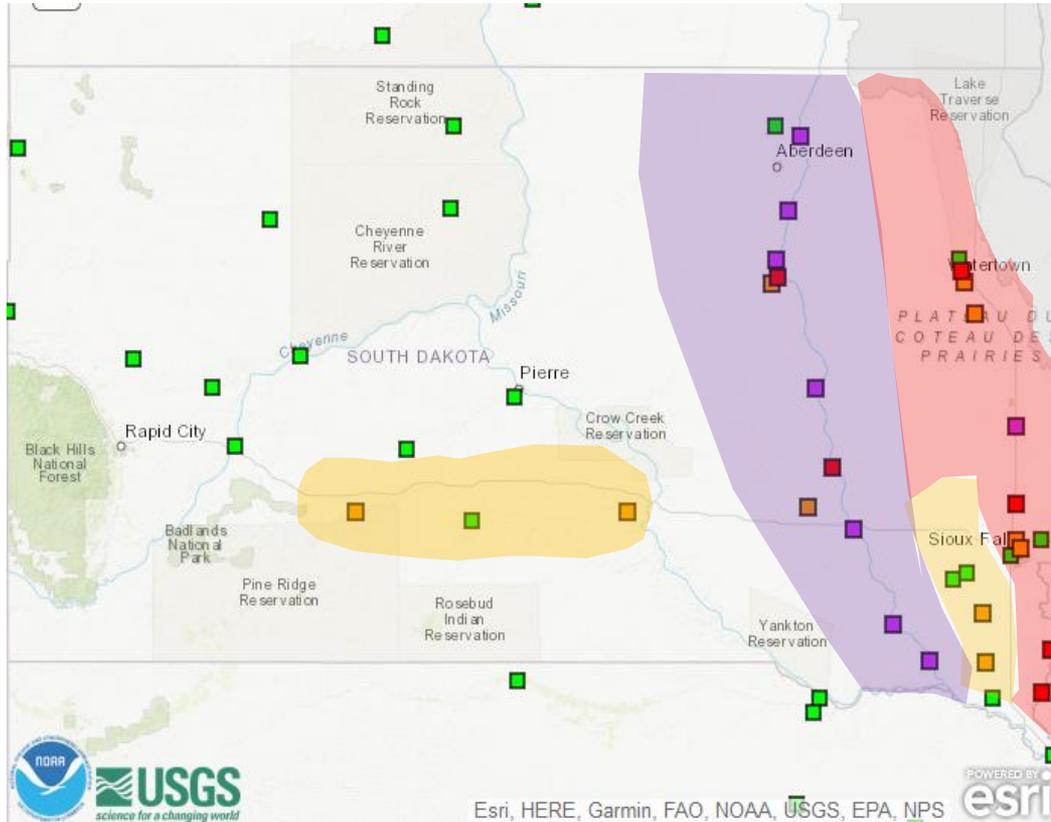


**Pipestem Creek: Minor**

**James River: Minor**



# MISSOURI BASIN: Flood Potential Outlook South Dakota



**James River: major**

**Turtle Creek: moderate**

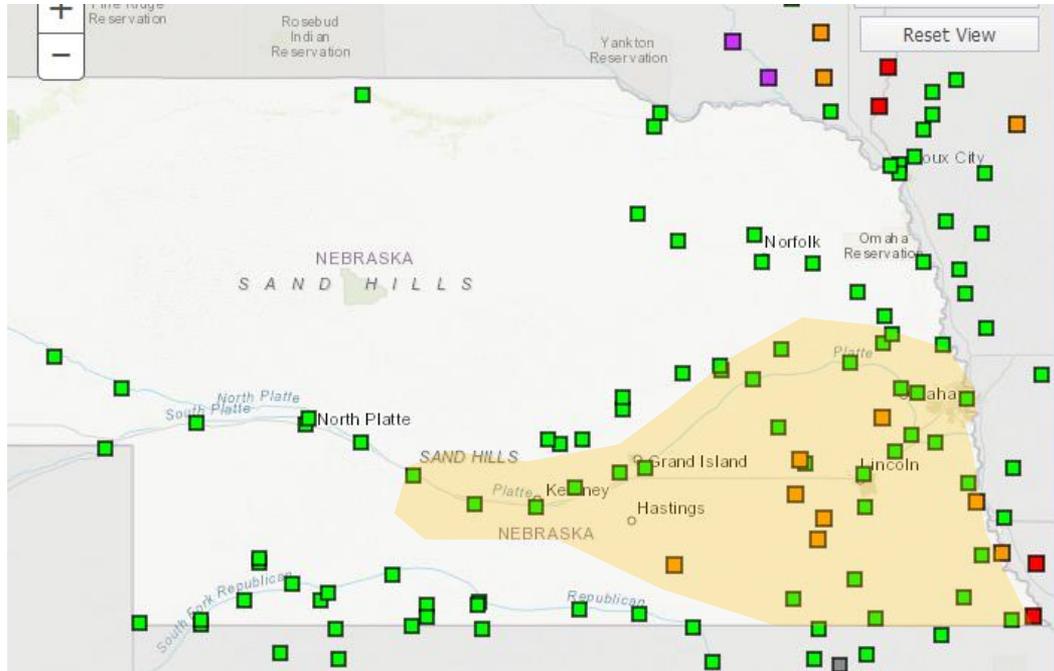
**Big Sioux River: moderate**

**Vermillion R: minor**

**White River: minor**

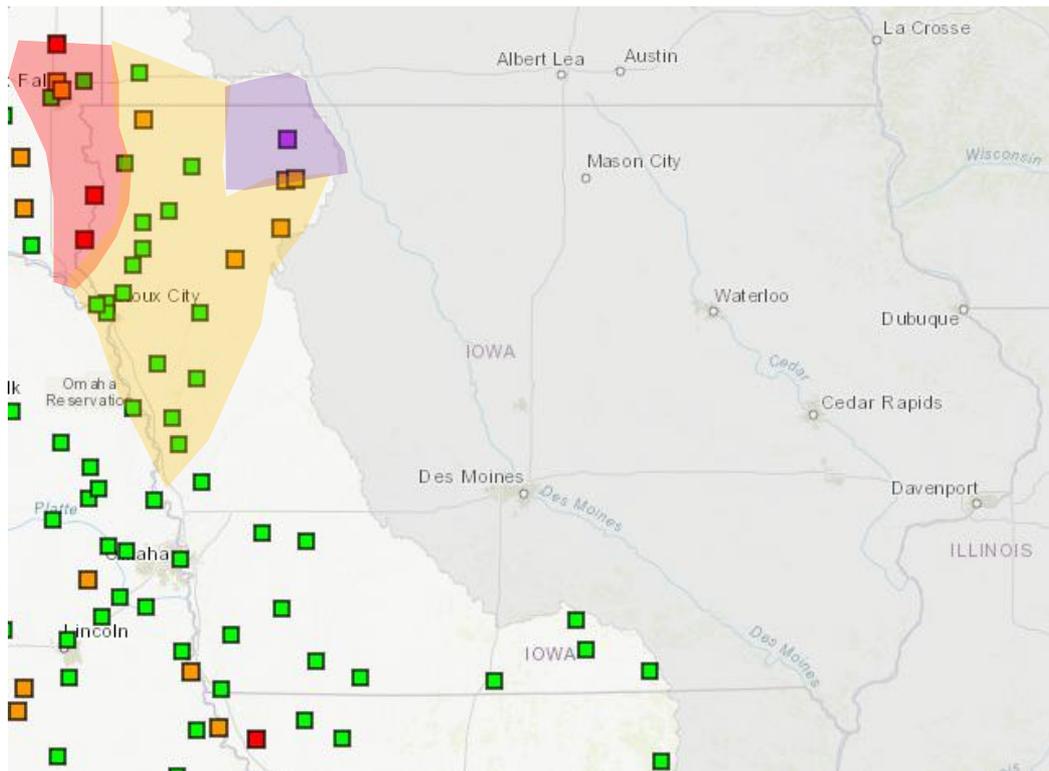
**Firesteel Creek: minor**

# MISSOURI BASIN: Flood Potential Outlook Nebraska



**Wahoo Creek: moderate**  
**Platte River: minor**  
**Big Blue River: minor**  
**Little Blue River: minor**  
**W.Fk.Big Blue R: minor**  
**Lincoln Creek: minor**  
**Turkey Creek: minor**  
**Shell Creek: minor**

# MISSOURI BASIN: Flood Potential Outlook Iowa



**Little Sioux River: major  
(upper end)**

**Big Sioux River: moderate**

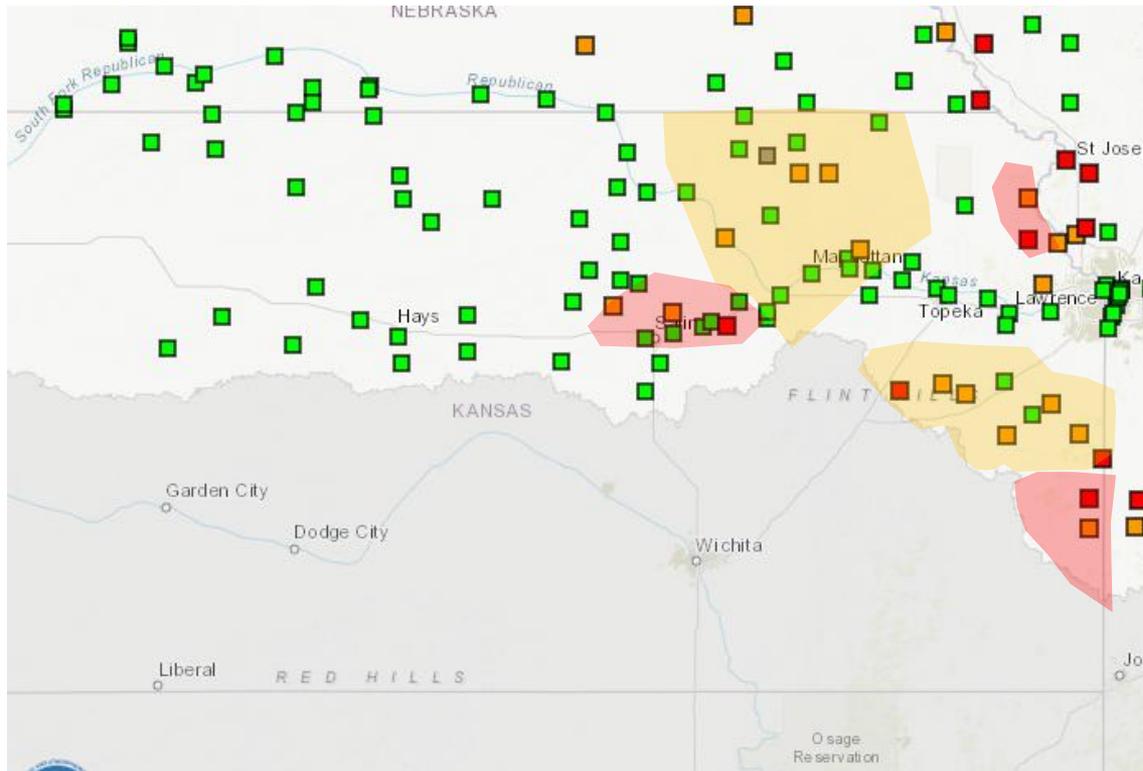
**Ocheyedan R: minor**

**Floyd River: minor**

**Rock River: minor**



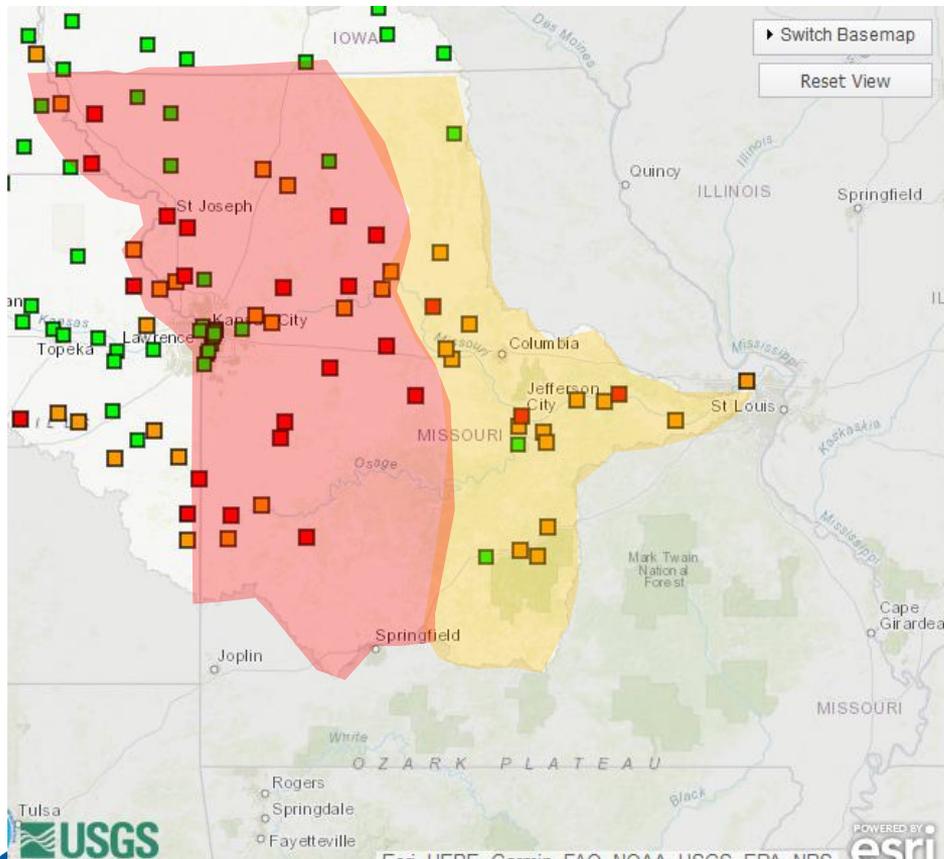
# MISSOURI BASIN: Flood Potential Outlook Kansas



**Little Osage R: moderate**  
**Smoky Hill R: moderate**  
**Stranger Creek: moderate**  
**Marais des Cygnes: moderate**  
**Big Blue River: minor**  
**Little Blue River: minor**  
**Marmaton River: minor**  
**Black Vermillion: minor**  
**Vermillion River: minor**  
**Republican River: minor**  
**Solomon River: minor**  
**Saline River: minor**  
**Salt Creek: minor**

# MISSOURI BASIN:

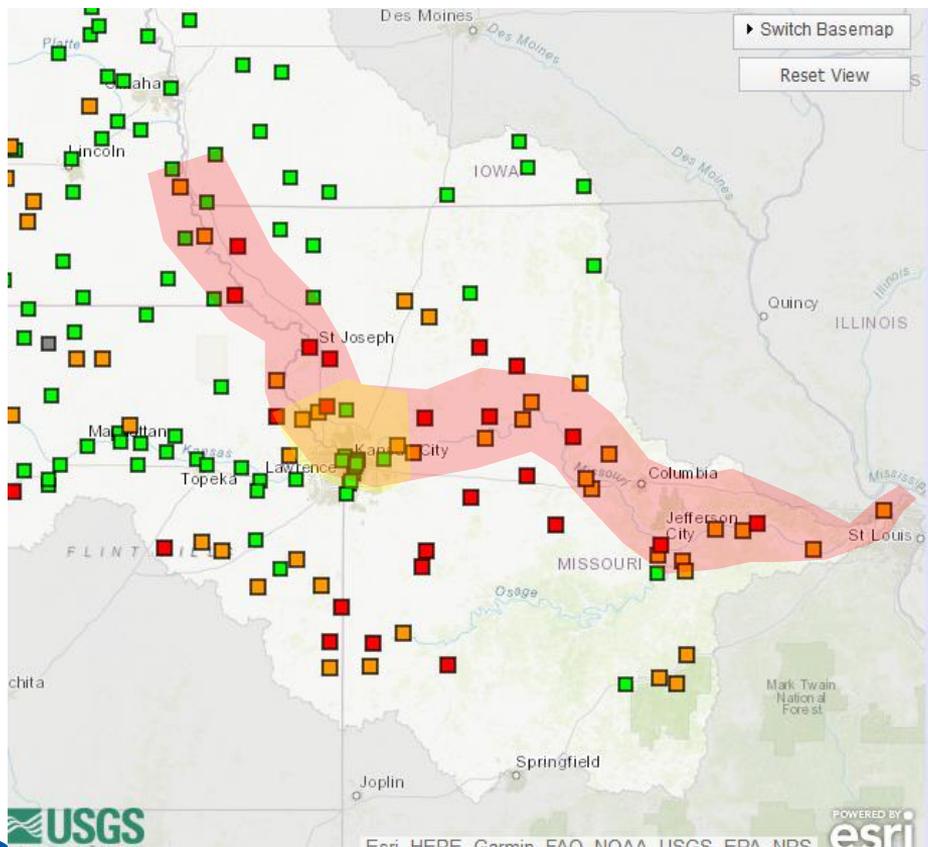
## Flood Potential Outlook Missouri



- Grand River: moderate**
- Crooked River: moderate**
- Wakenda Creek: moderate**
- Blackwater River: moderate**
- Lamine River: moderate**
- Little Osage River: moderate**
- Sac River: moderate**
- South Grand River: moderate**
- Big Creek: moderate**
- Tarkio River: moderate**
- Platte River: moderate**
- Chariton River: minor**
- Moreau River: minor**
- Moniteau Creek: minor**
- Petite Saline Creek: minor**
- Roubidoux Creek: minor**
- Big Piney River: minor**
- Gasconade River: minor**
- Osage River: minor**
- Marmaton River: minor**
- Maries River: minor**

# MISSOURI BASIN:

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



**Flooding along the mainstem is expected from Nebraska City to the mouth at St. Louis.**

**Primarily moderate level flooding expected, except in the reach just above and below Kansas City where minor flooding is projected.**

**Major level flooding cannot be ruled out below KC.**

# MISSOURI BASIN:

## Flood Potential Outlook: Summary Points

- Mountain snowpack is slightly above average this year. We still have less than 20% of snow accumulating period remaining.
- Plains snowpack of any consequence is limited to eastern North Dakota. 1.5 to 3 inches of water remains. Plains snowmelt has already led to flooding in Milk River basin in MT, renewed flooding along James River in SD, Big Sioux in SD & IA, and Little Sioux in IA.
- Saturated soils over much of the basin. Frozen ground not a concern.
- Concern for ice jam flooding has pretty much passed.
- Significant flooding due to mountain snow runoff alone is not likely.
- Episodic flooding likely in the lower portion of the basin (eastern KS, southern IA, MO) due to Spring-time thunderstorm activity. This is typical whether soils are wet or not.
- ABOVE NORMAL FLOOD RISK in the eastern portion of the basin. **MAJOR FLOODING IS ALREADY OCCURRING ALONG JAMES R in SD.** Widespread minor-to-moderate flooding expected elsewhere in the eastern portion of the basin.

