Final--April 2018 update of the Wyoming Spring 2018 Snowmelt Report NOAA NWS Riverton

Quick Synopsis:

Mountain snowpack and associated snow water equivalents (SWEs) across central through northwestern Wyoming were generally **above** to**much above** average by the middle of April; while SWEs across basins in southern Wyoming continued to be generally **below** average. SWEs at the peak snowmelt runoff elevations (8,500' – 10.000') were the highest across the Shoshone and Upper Yellowstone Basins at **140**to **180** percent of median. The Upper Bear and Little Snake Drainages had SWEs at **75** to near **85** percent of median at the peak snowmelt runoff elevations.

This outlook is based on various diverse hydrological factors such as snow water equivalents (SWEs) in the mountain snowpack, basin morphology (i.e. how basins respond to snowmelt runoff), antecedent soil moisture, biological factors (bark beetle kill/spruce blight), low elevation snow depths, and
likely temperature and precipitation trends during late spring/early summer.

HIGHLIGHTS:

…**High** potential for flooding associated with snowmelt runoff is expected across extreme lower portions of the Big Wind River….

…**Moderate to High** potential for flooding associated with snowmelt runoff is forecasted over upper sections of the South Fork of the Shoshone River Watershed, headwater streams along the northeastern side of the upper Snake River Basin, and along headwater creeks and streams along the west side of the Big Horn Mountains…

…**Moderate** potential for snowmelt runoff flooding is forecasted across the middle to lower portions of the North/South Forks of the Shoshone River Basin, upper to middle sections of the Big Wind River Drainage, lower sections of the Upper Green River (La Barge), and along headwater streams along the east side of the Snake River Basin…

…All other of headwater basins across Wyoming can expect a generally **Low** potential for flooding due to springtime snowmelt runoff...

This is the **last** outlook for this water year.

****

Other hydrological information for Wyoming can be found at the NOAA hydrology website:
http://www.weather.gov/riw/local_hydrology

Monthly Wyoming Hydrologic Summary and Graphics:
(updated monthly around the 15th of every month)
http://www.weather.gov/media/riw/hydro/hydro_report.pdf

Wyoming Drought Information Page:
(updated at least once a month)
http://www.weather.gov/riw/drought

Wyoming Graphical Water Supply Outlook:
(updated by the 10th of every month—January-June)
http://www.weather.gov/images/riw/hydro/watersupply.png

Wyoming Average Precipitation by Basin:
(updated monthly)
http://www.weather.gov/images/riw/hydro/wyomingprecip.png

Wyoming Spring Snowmelt Runoff Flood Potential Graphic:
(updated around the 20th of the month---February-May)
http://www.weather.gov/images/riw/hydro/floodoutlook.png

Current and Forecast Wyoming Streamflows and/or River Stages:
http://water.weather.gov/ahps2/index.php?wfo=RIW

http://water.weather.gov/ahps2/index.php?wfo=CYS

http://waterdata.usgs.gov/wy/nwis/rt

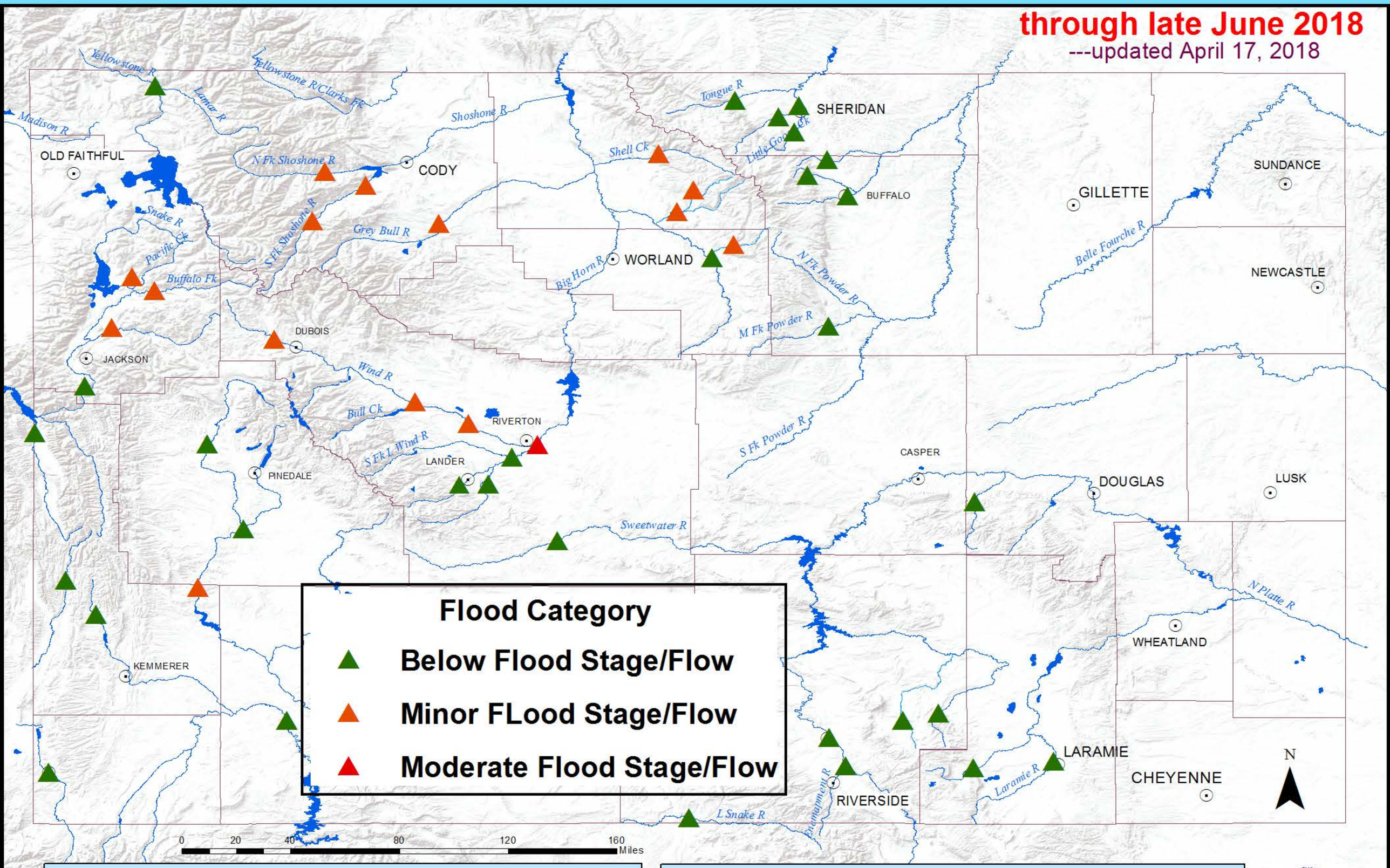
****

Jim Fahey
Wyoming NOAA hydrologist
work 307-857-3898 ext 493
cell 307-709-8778

Wyoming Spring Runoff Peak Flood Categories

through late June 2018

---updated April 17, 2018



Flood Category

- **Below Flood Stage/Flow**
- **Minor FLood Stage/Flow**
- **Moderate Flood Stage/Flow**

Note: This outlook is based on current data data available during preparation.

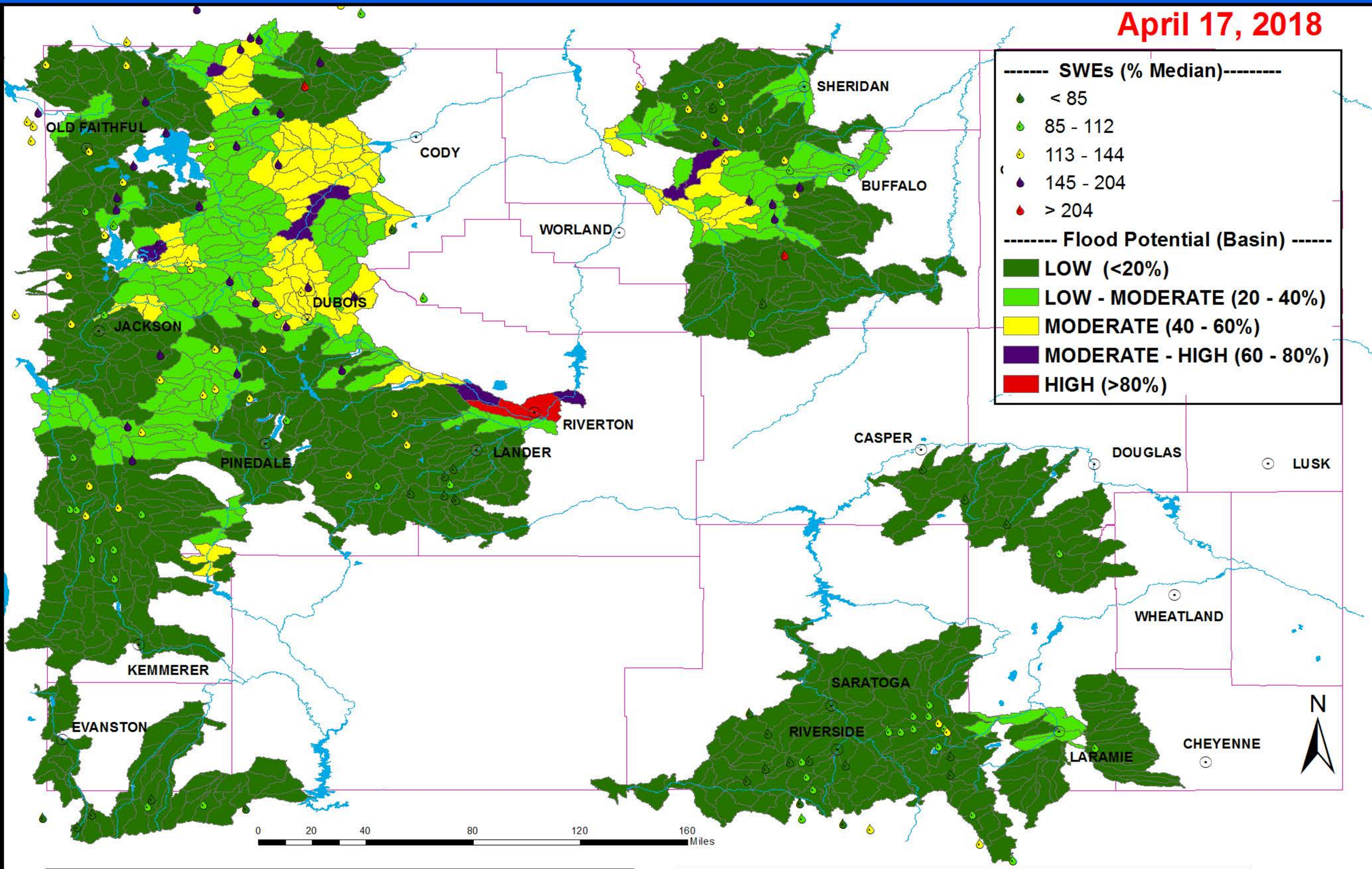
Note: A much HIGHER Flood Category can occur at any location during periods of:
1) Higher that normal temperatures occurring during snowmelt.
2) Extended heavy rainfall occurring over a melting snowpack.

This the LAST update for water year 2018.

Sources : Esri, USGS, NOAA

Wyoming Spring Snowmelt Flood Potential Outlook

April 17, 2018



------- SWEs (% Median)---------
- < 85
- 85 - 112
- 113 - 144
- 145 - 204
- > 204

-------- Flood Potential (Basin) ------
- LOW (<20%)
- LOW - MODERATE (20 - 40%)
- MODERATE (40 - 60%)
- MODERATE - HIGH (60 - 80%)
- HIGH (>80%)

Note: This outlook is based on any Snow Water Equivalent (SWE) data available duirng preparation.

SWE data courtesy of NRCS

Note: A much HIGHER Flood Potential can occur at any location during periods of:
1) Higher that normal temperatures occurring during snowmelt.
2) Extended heavy rainfall occurring over a melting snowpack.

The is the LAST graphical outlook for Water Year 2018.