

March 2018 Wyoming Spring Snowmelt Flood Outlook

Quick Synopsis:

Mountain snowpack and associated snow water equivalents (SWEs) across central through northwestern Wyoming were generally **above** to **much above** average by late March; 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 **150** to **160** 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:

...**Moderate to High** potential for flooding associated with snowmelt runoff is expected across extreme lower portions of the Big Wind Watershed, over upper sections of the South Fork of the Shoshone Watershed, 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 Basin, upper to middle sections of the Big Wind Watershed, and along headwater streams in the upper Snake River Basin...

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

The next outlook will be issued in late April.

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>

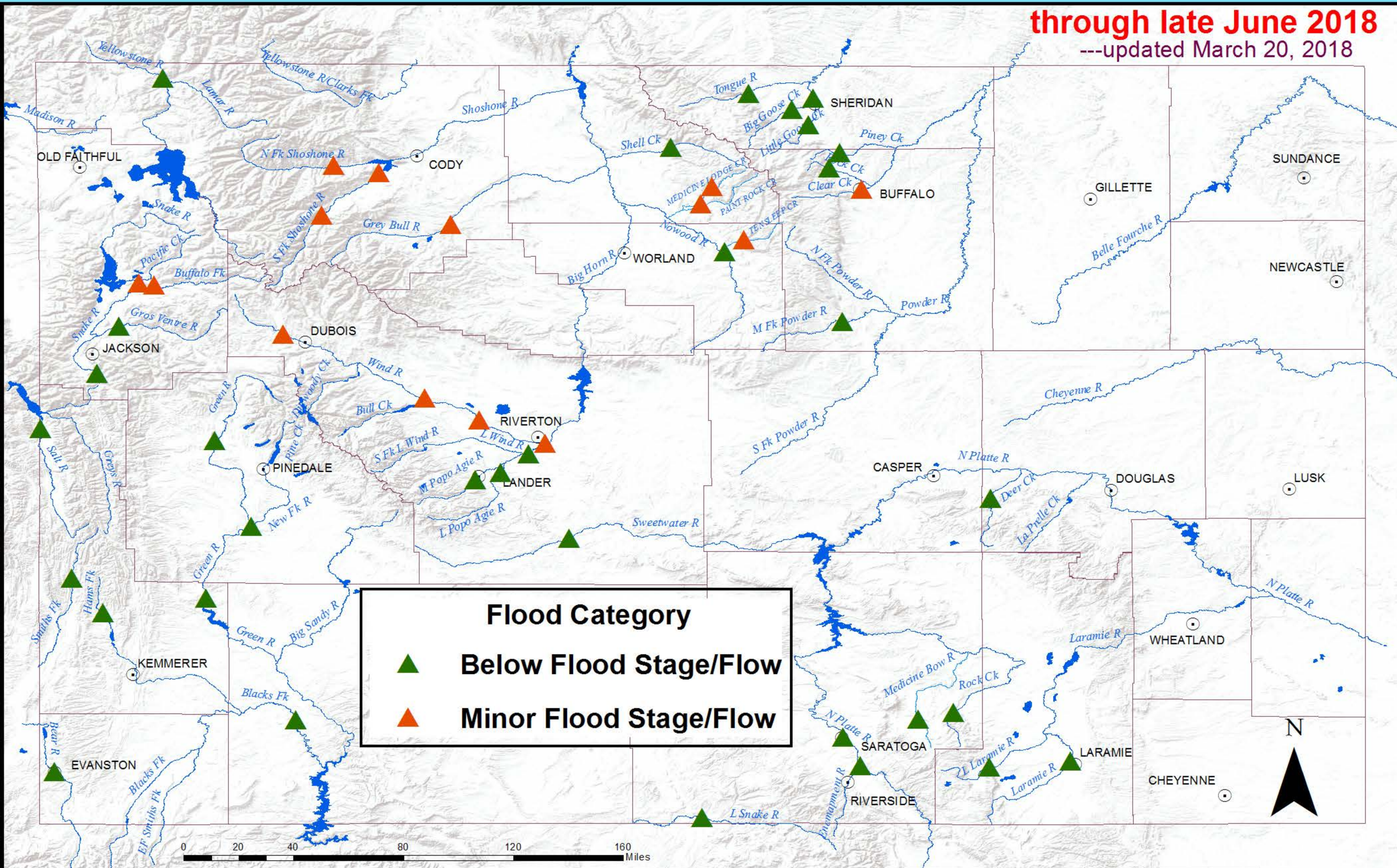
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Wyoming Spring Runoff Peak Flood Categories

through late June 2018
 ---updated March 20, 2018



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

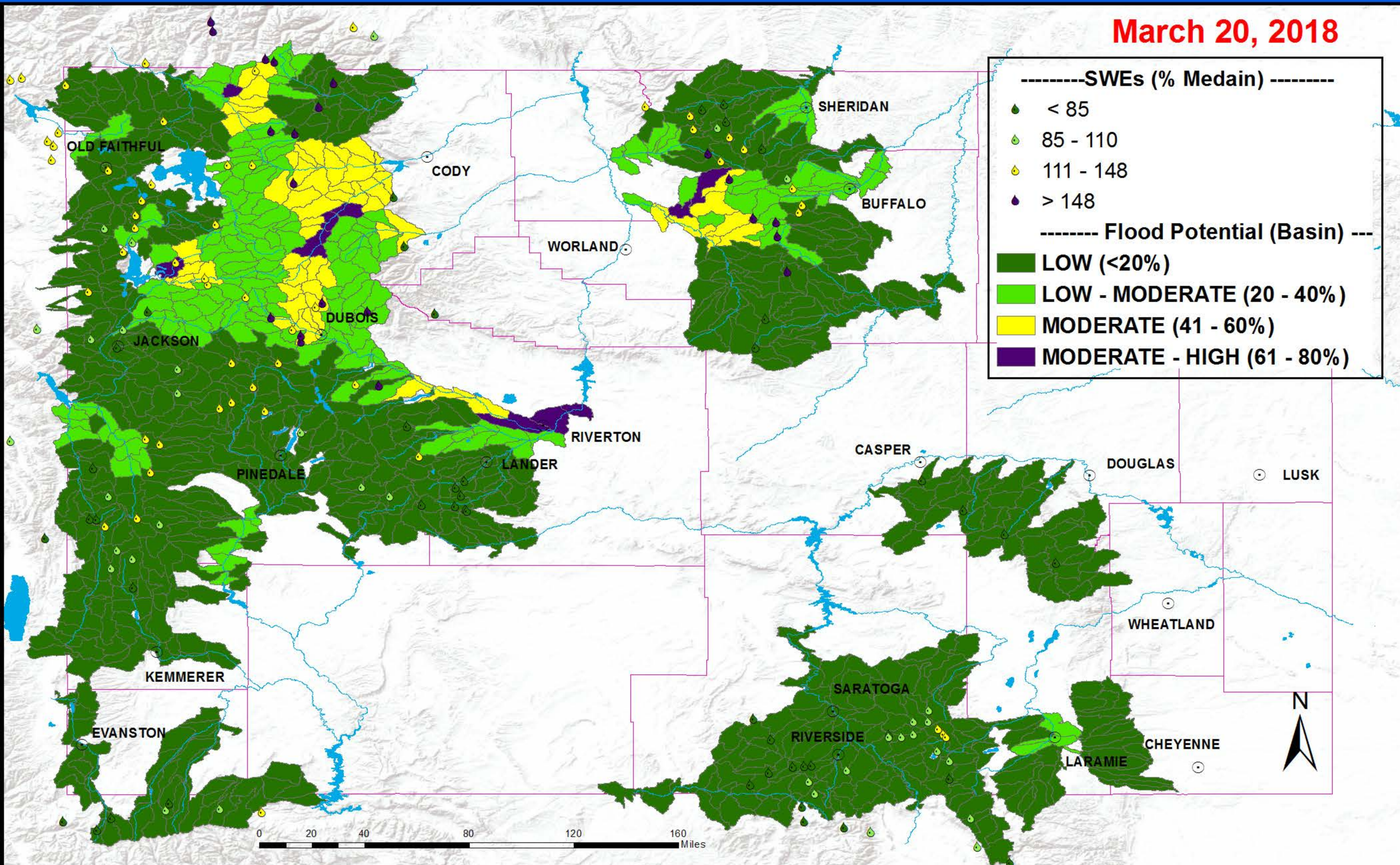
Note: A much HIGHER Flood Category can occur at any location during periods of:
 1) Higher than normal temperatures occurring during snowmelt.
 2) Extended heavy rainfall occurring over a melting snowpack.



The next update will be issued by April 18, 2018.

Wyoming Spring Snowmelt Flood Potential Outlook

March 20, 2018



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

SWE data courtesy of NRCS

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- 1) Higher than normal temperatures occurring during snowmelt.
- 2) Extended heavy rainfall occurring over a melting snowpack.

The next graphical outlook will be issued by April 18, 2018.

