

Yellowtail Operations Meeting

Snowpack and Streamflow Update

April 14, 2016



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<http://www.nrcs.usda.gov/wps/portal/nrcs/main/mt/snow/>

Streams are opening up for the spring in during snow surveys at the end of March.

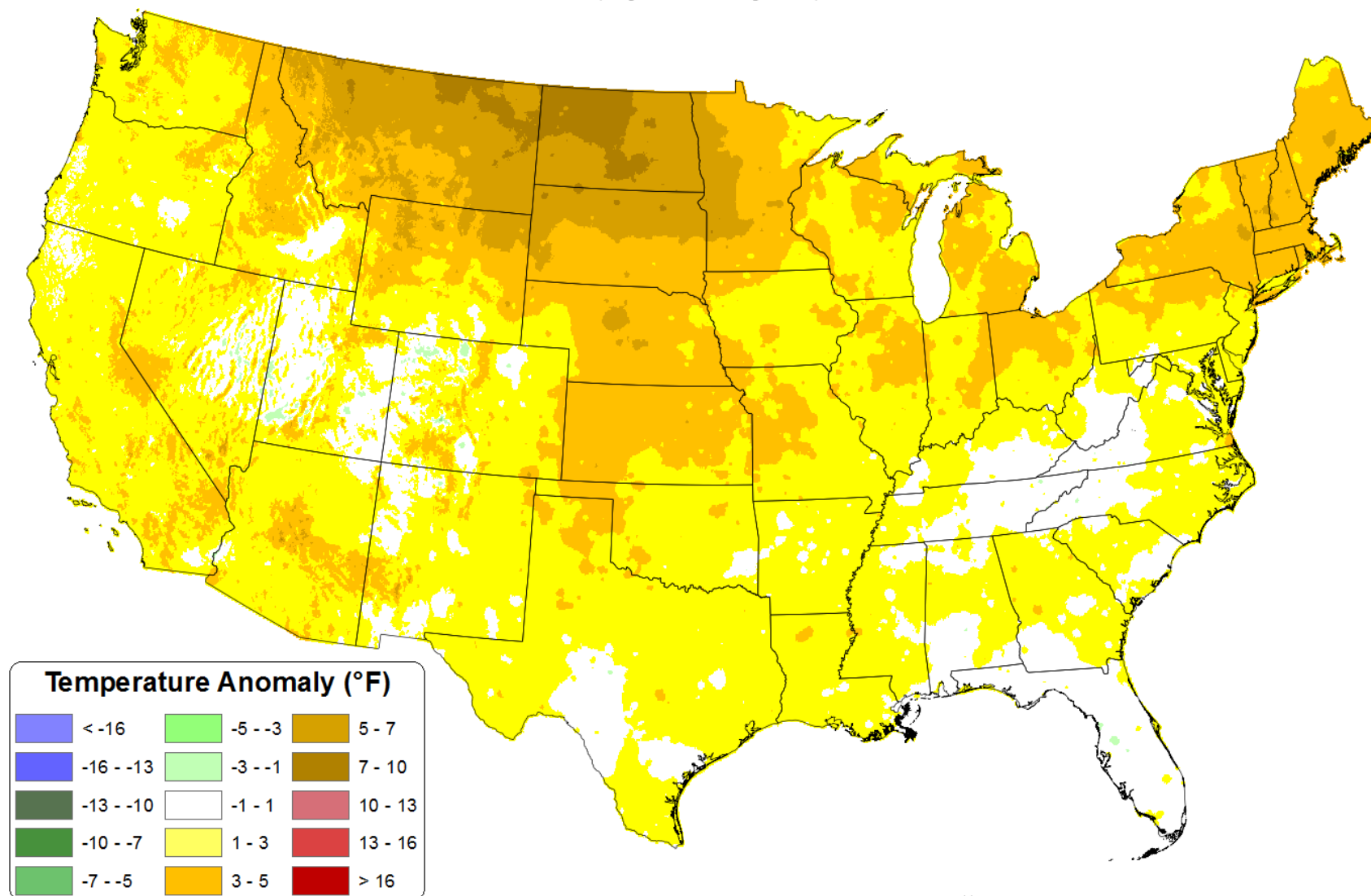
Air Temperature

Daily Mean Temperature Anomaly: January 2016 - March 2016

Period ending 7 AM EST 31 Mar 2016

Base period: 1981-2010

(Map created 02 Apr 2016)

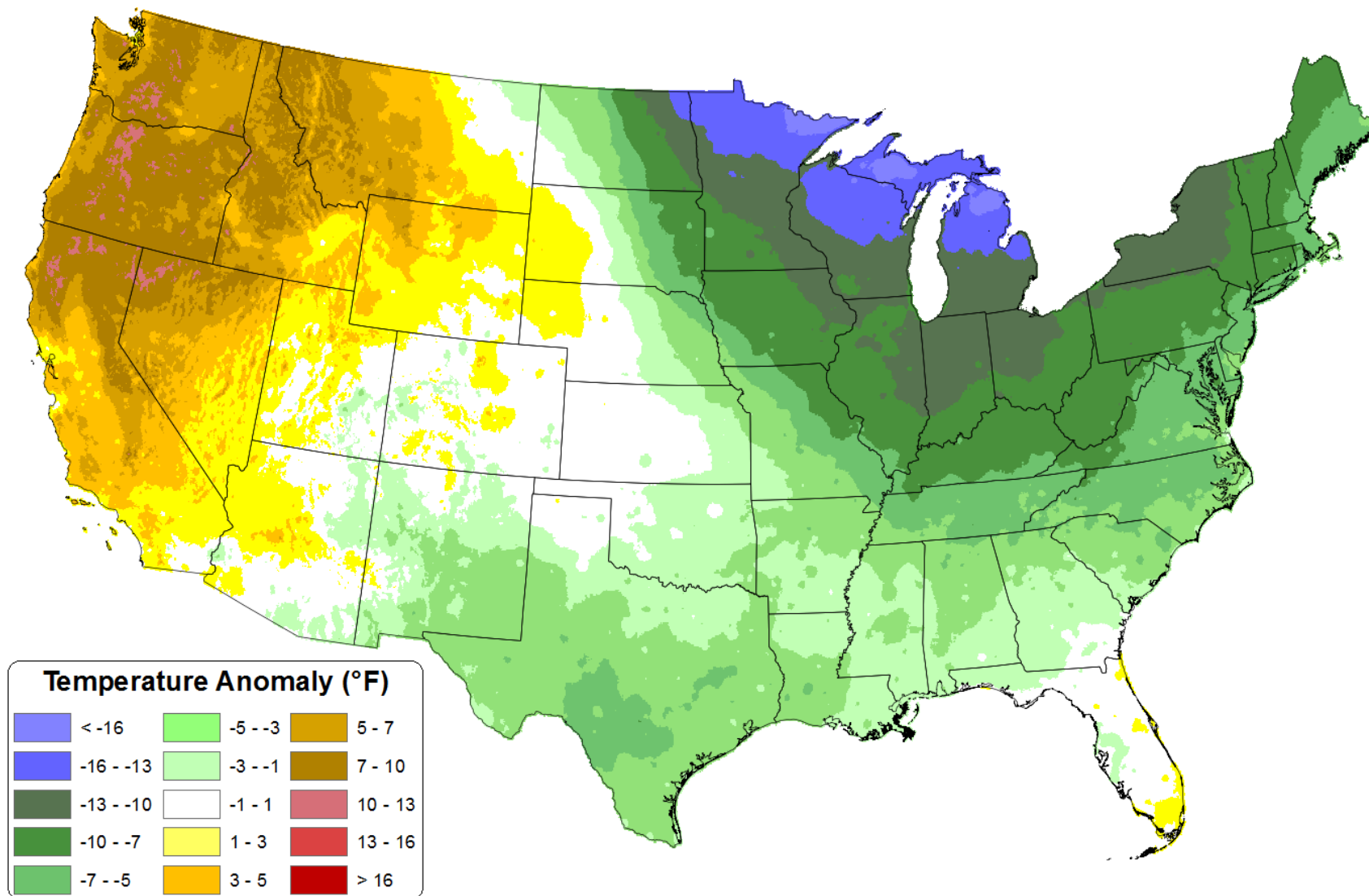


Daily Mean Temperature Anomaly: 01 April 2016 - 10 April 2016

Period ending 7 AM EST 10 Apr 2016

Base period: 1981-2010

(Map created 11 Apr 2016)



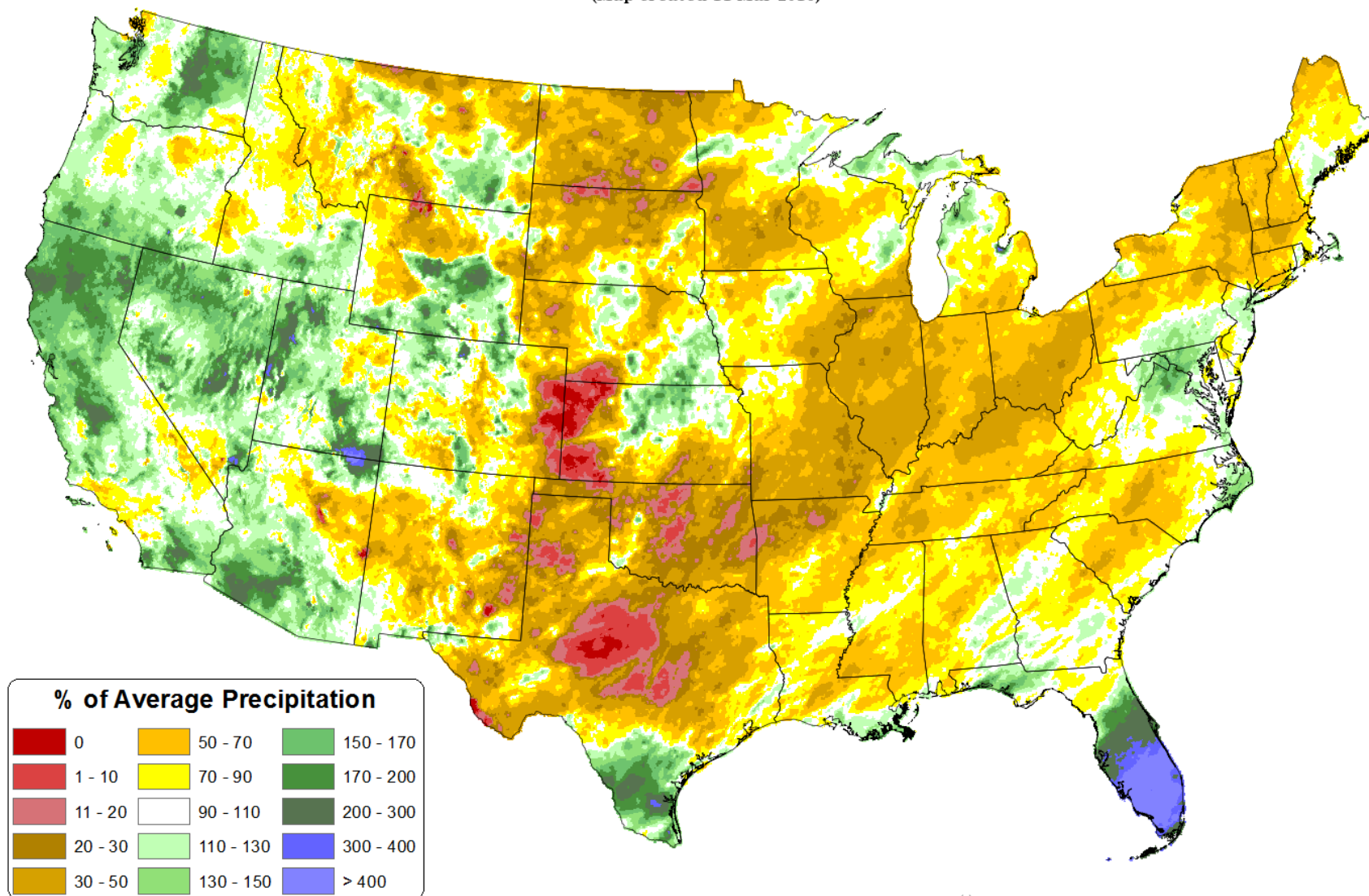
Precipitation

Total Precipitation Anomaly: January 2016

Period ending 31 Jan 2016

Base period: 1981-2010

(Map created 11 Mar 2016)

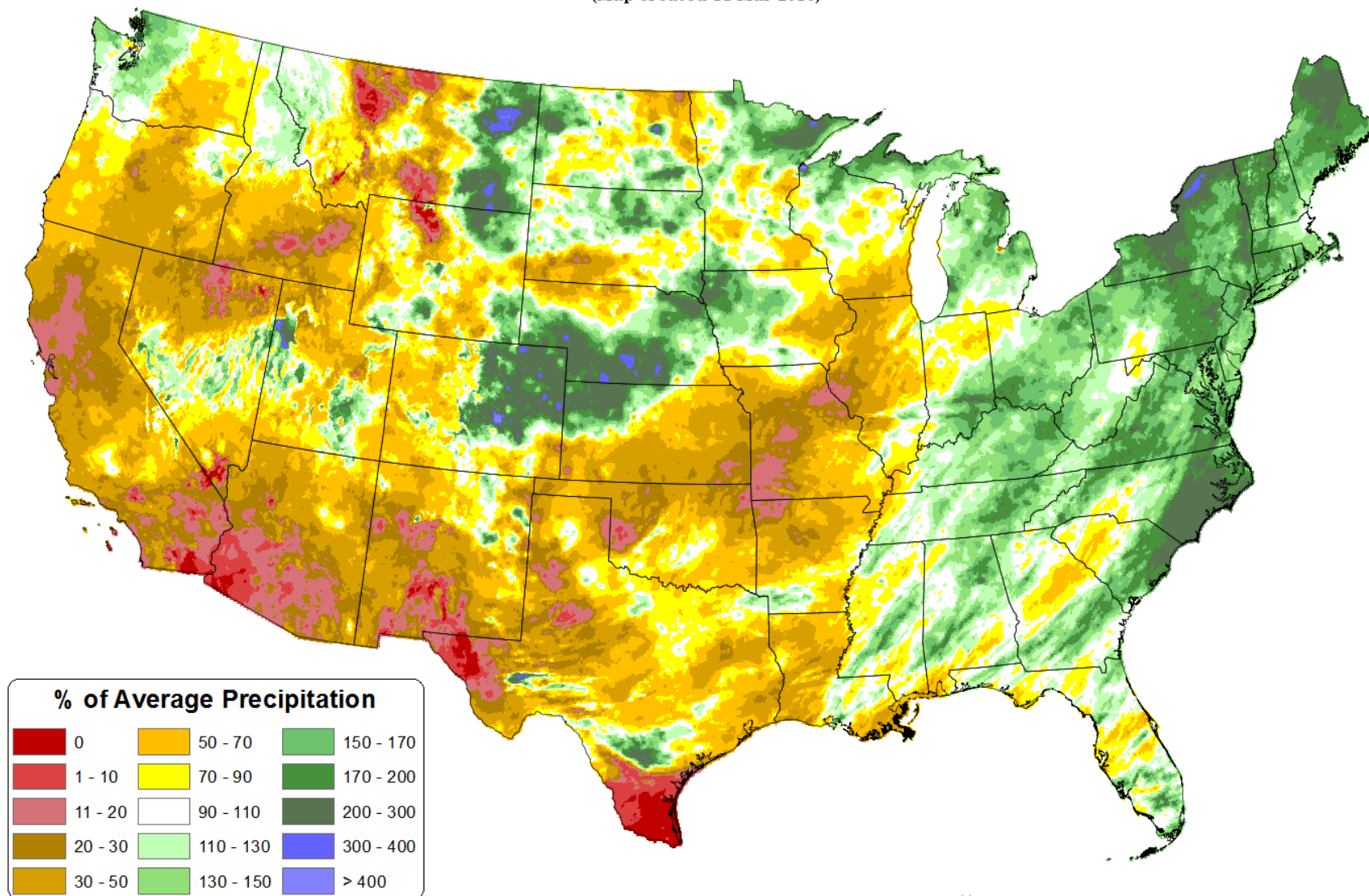


Total Precipitation Anomaly: February 2016

Period ending 29 Feb 2016

Base period: 1981-2010

(Map created 11 Mar 2016)

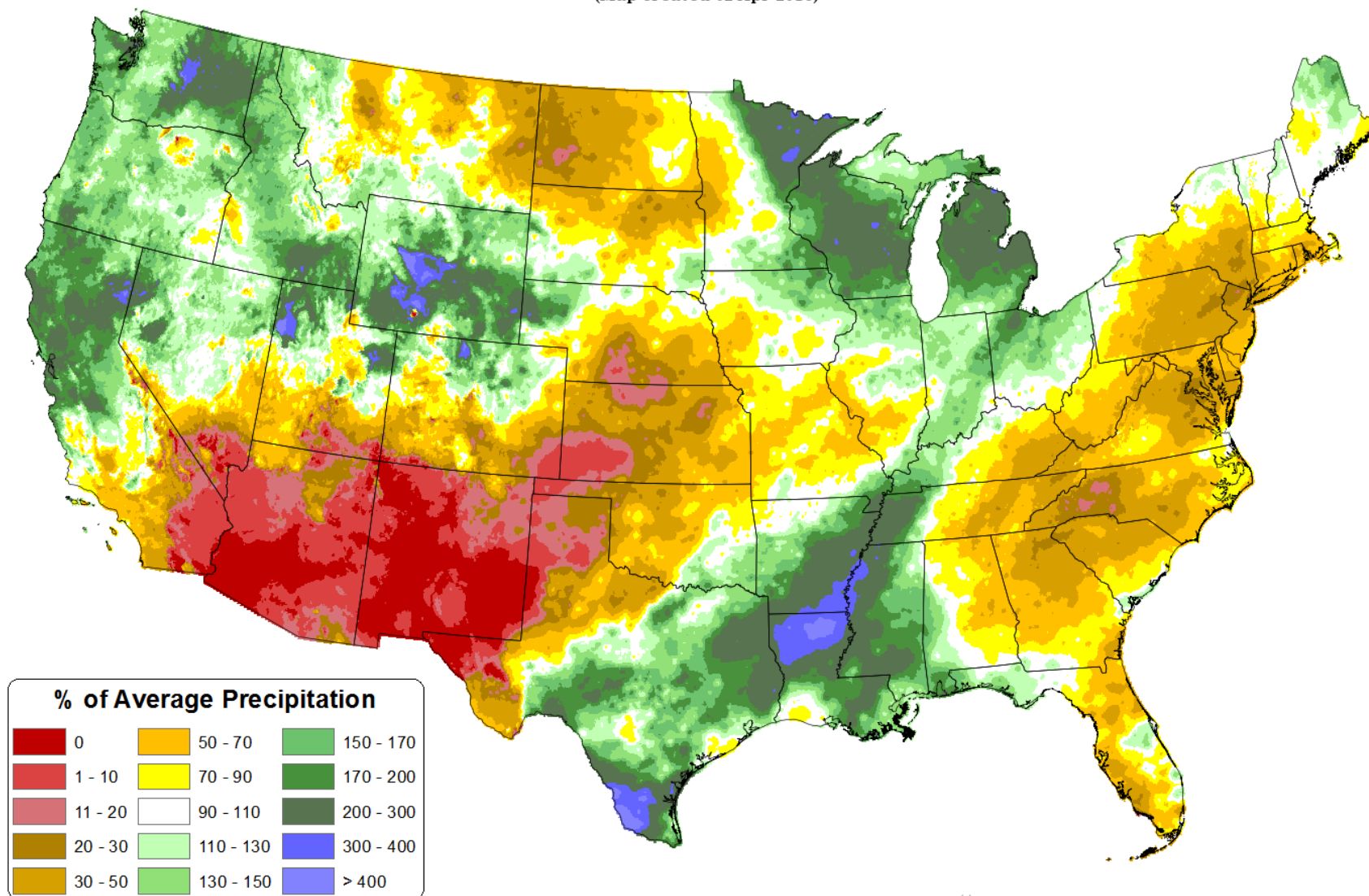


Total Precipitation Anomaly: March 2016

Period ending 31 Mar 2016

Base period: 1981-2010

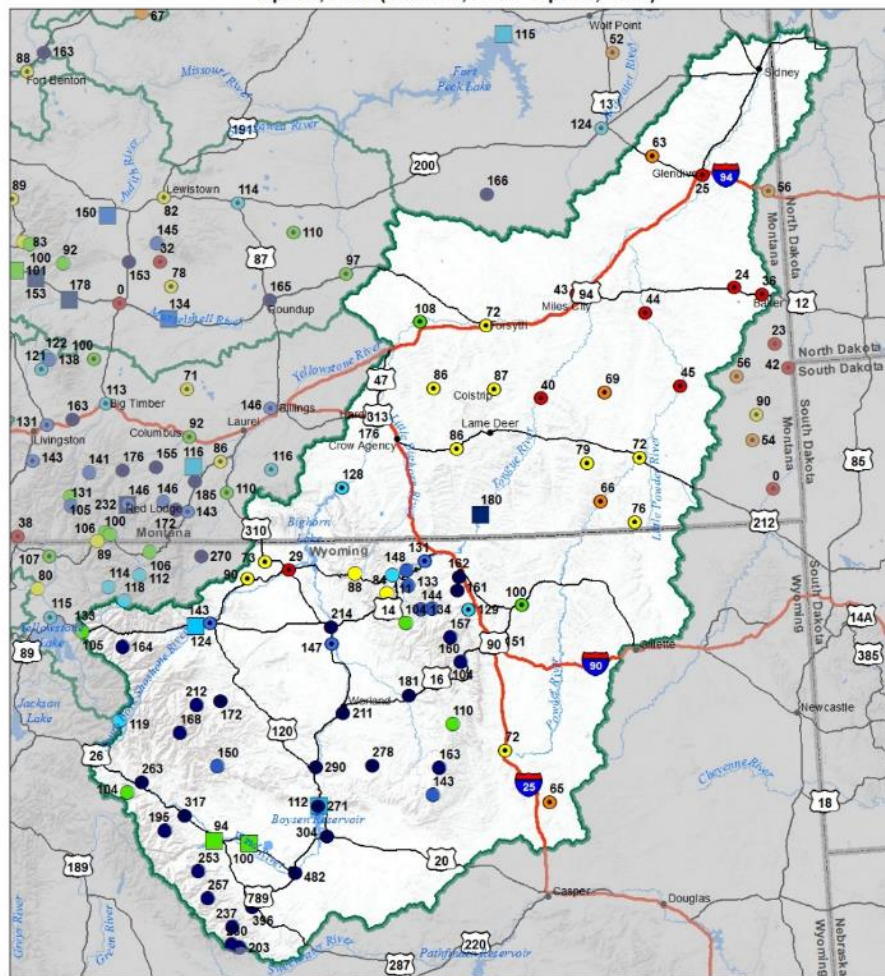
(Map created 02 Apr 2016)



Montana Snow Survey



Lower Yellowstone River Basin
Monthly Precipitation and Reservoir Levels
Percentage of Normal
April 1, 2016 (March 1, 2016 - April 1, 2016)



SNOTEL

- > 150%
- 131 - 150%
- 111 - 130%
- 91 - 110%

Precipitation Percent of Normal

COOP/ACIS

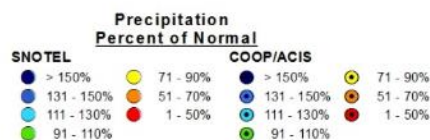
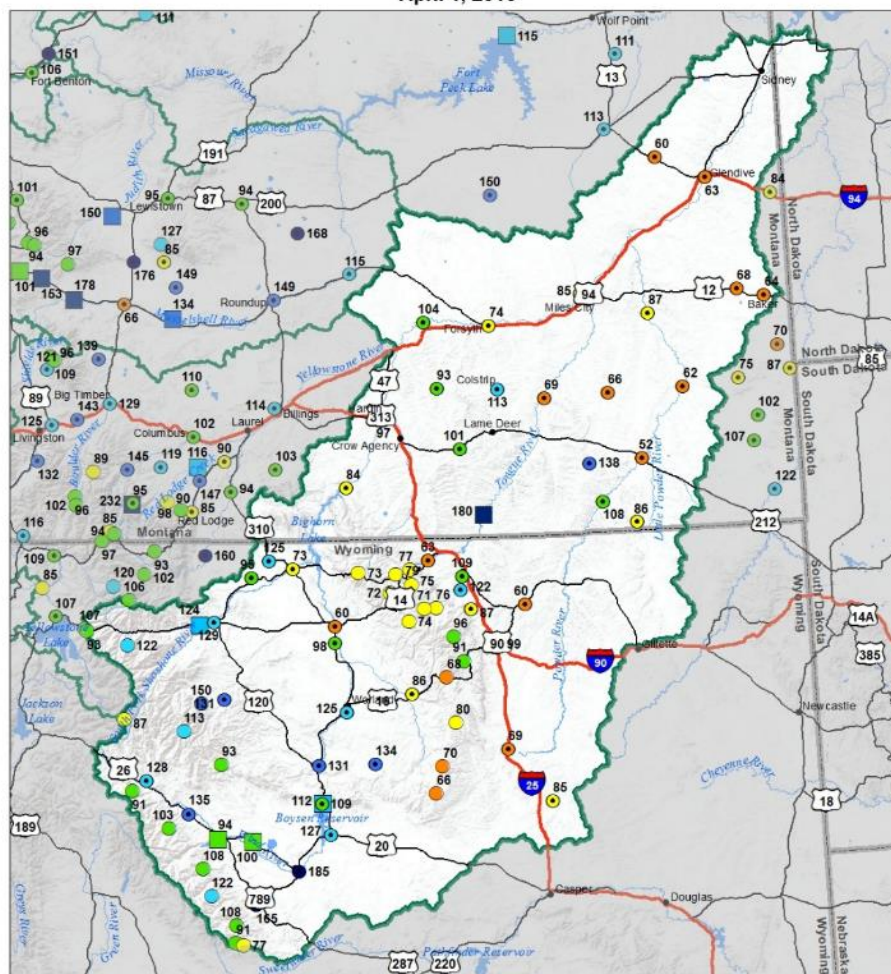
- > 150%
- 131 - 150%
- 111 - 130%
- 91 - 110%

Reservoirs Percent of Normal

- > 150%
- 131 - 150%
- 111 - 130%
- 91 - 110%
- 71 - 90%
- 51 - 70%
- 1 - 50%



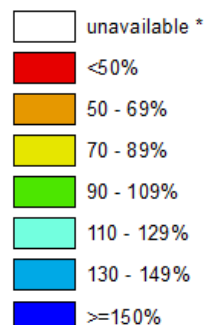
Lower Yellowstone River Basin
Water Year to Date Precipitation and Reservoir Levels
Percentage of Normal
April 1, 2016



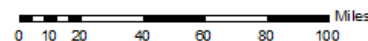
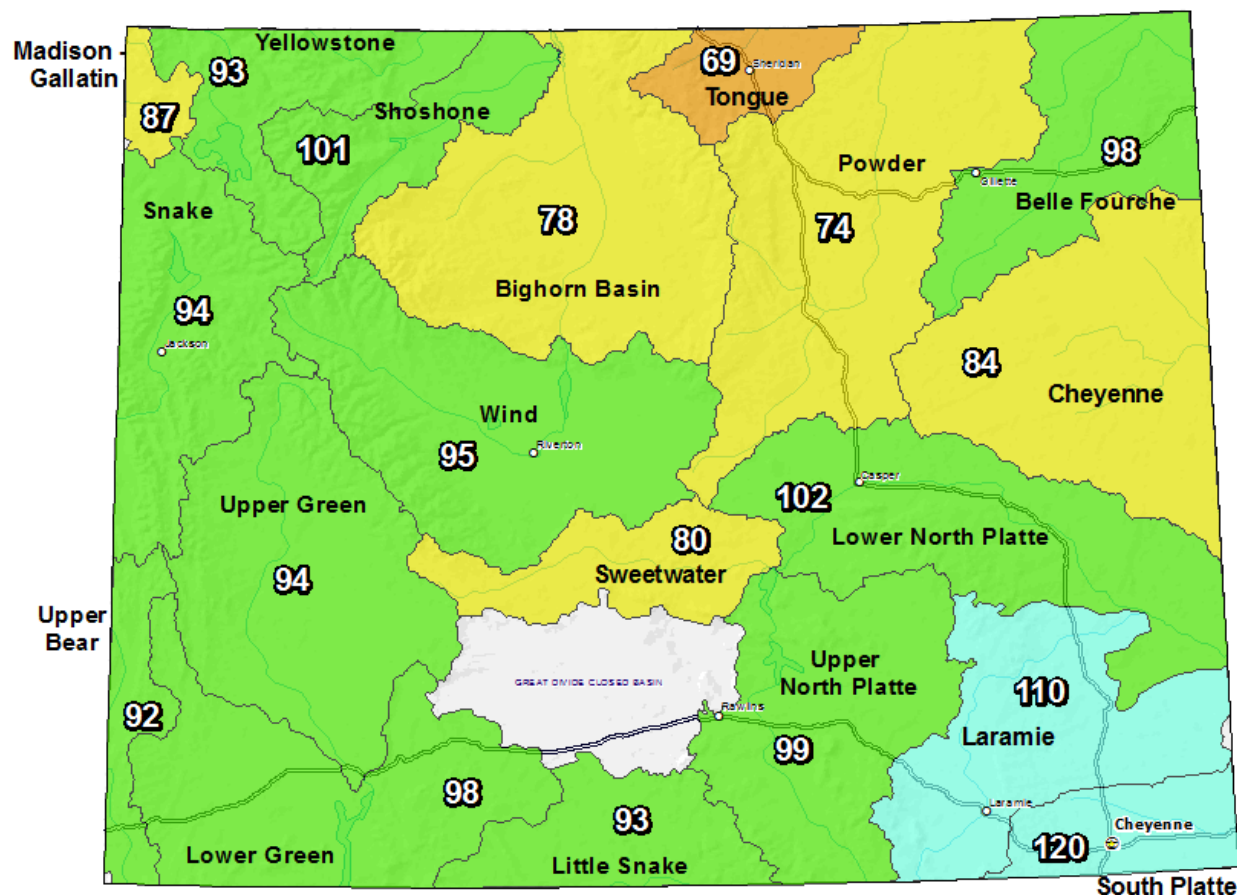
Wyoming SNOTEL Water Year (Oct 1) to Date Precipitation % of Normal

Apr 11, 2016

Water Year to Date
(Oct 1) Precipitation
Basin-wide Percent
of 1981-2010 Average



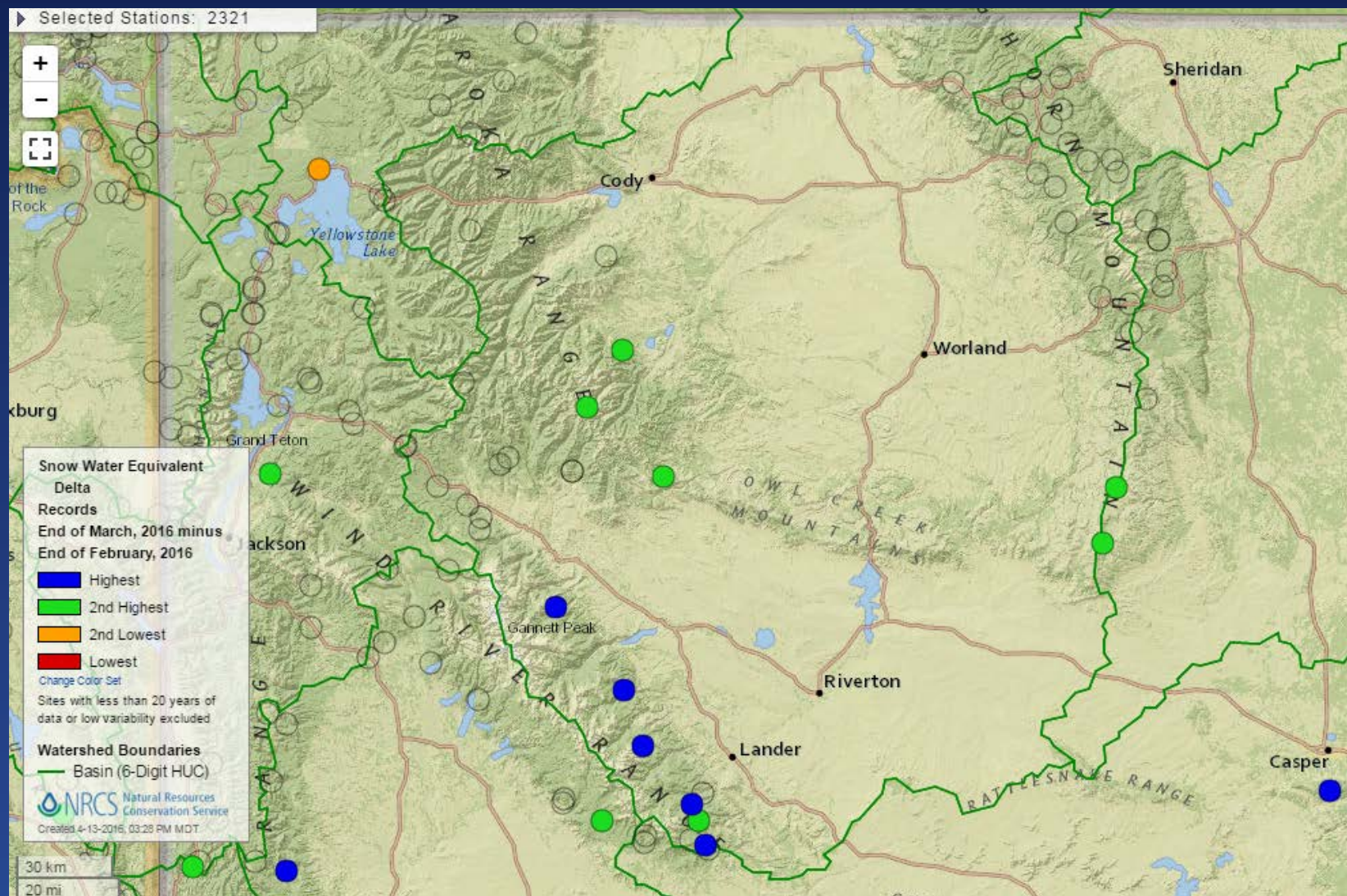
*Provisional Data
Subject to Revision*



Snowpack

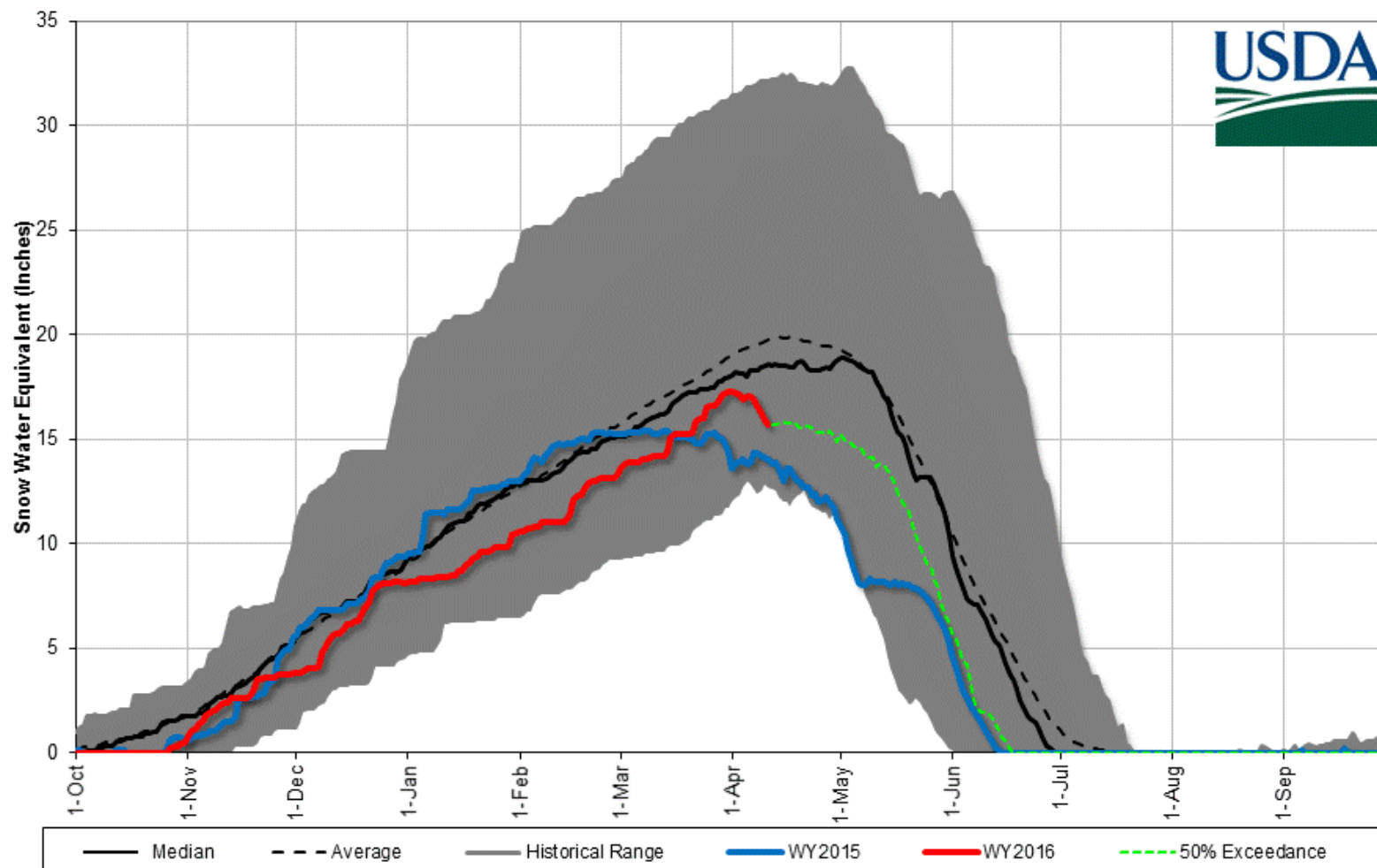


March SWE Records



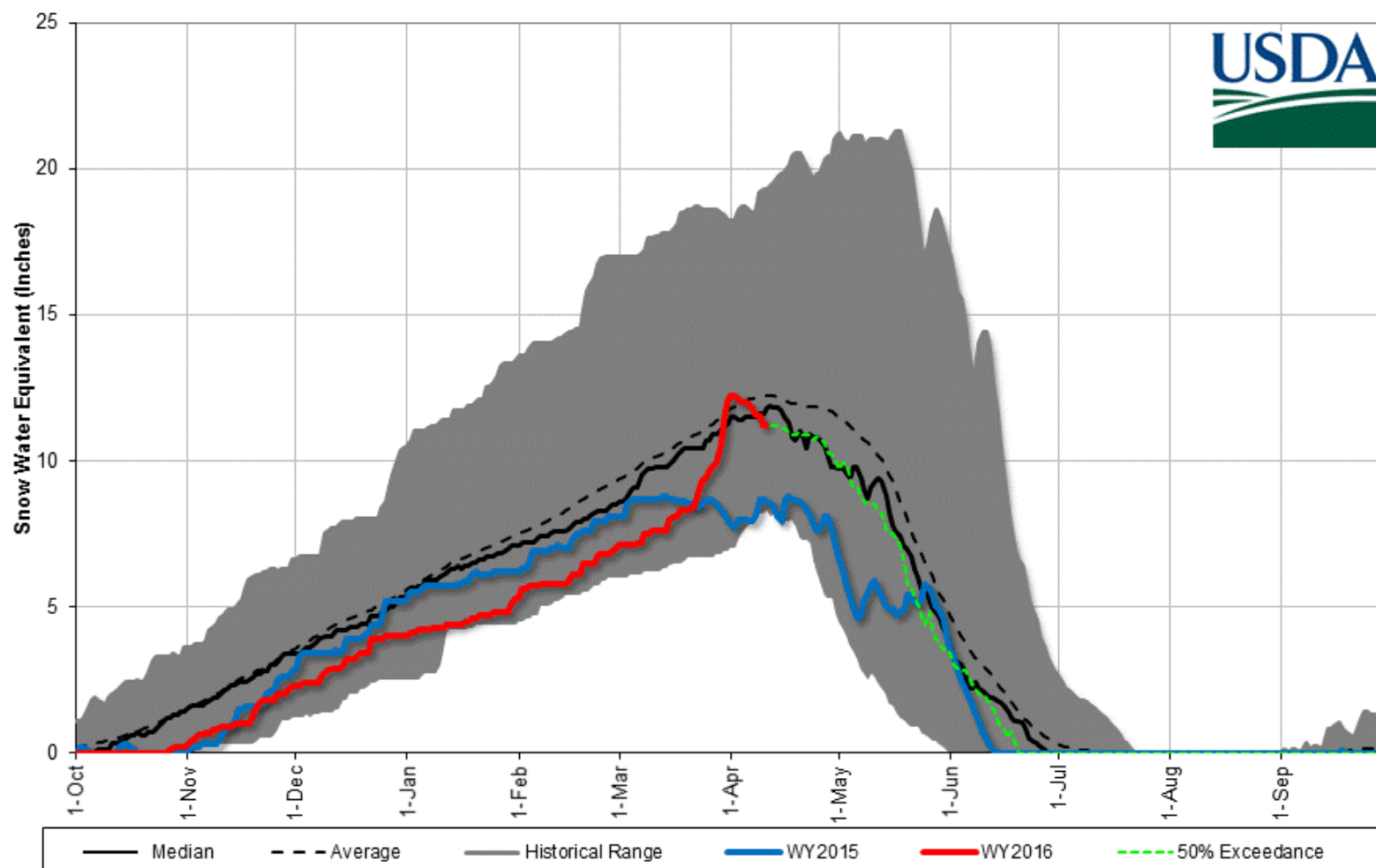
Shoshone River Basin Snowpack with Non-Exceedence Projections

Based on provisional SNOTEL daily data as of 4/11/2016



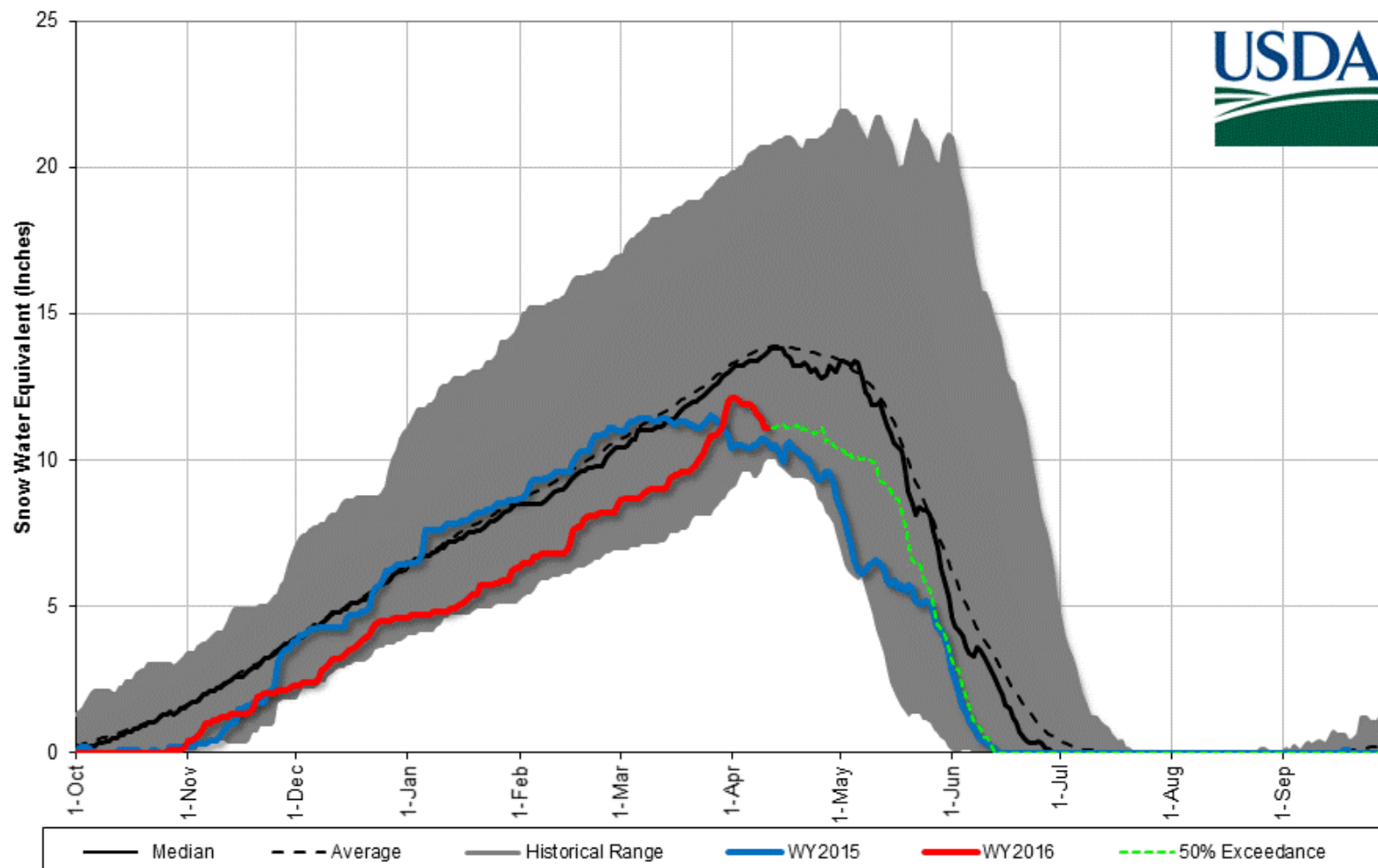
Wind River Basin Snowpack with Non-Exceedence Projections

Based on provisional SNOTEL daily data as of 4/11/2016



Bighorn River Basin Snowpack with Non-Exceedence Projections

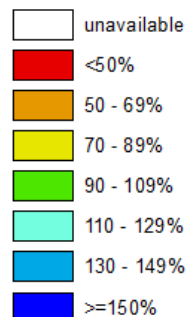
Based on provisional SNOTEL daily data as of 4/11/2016



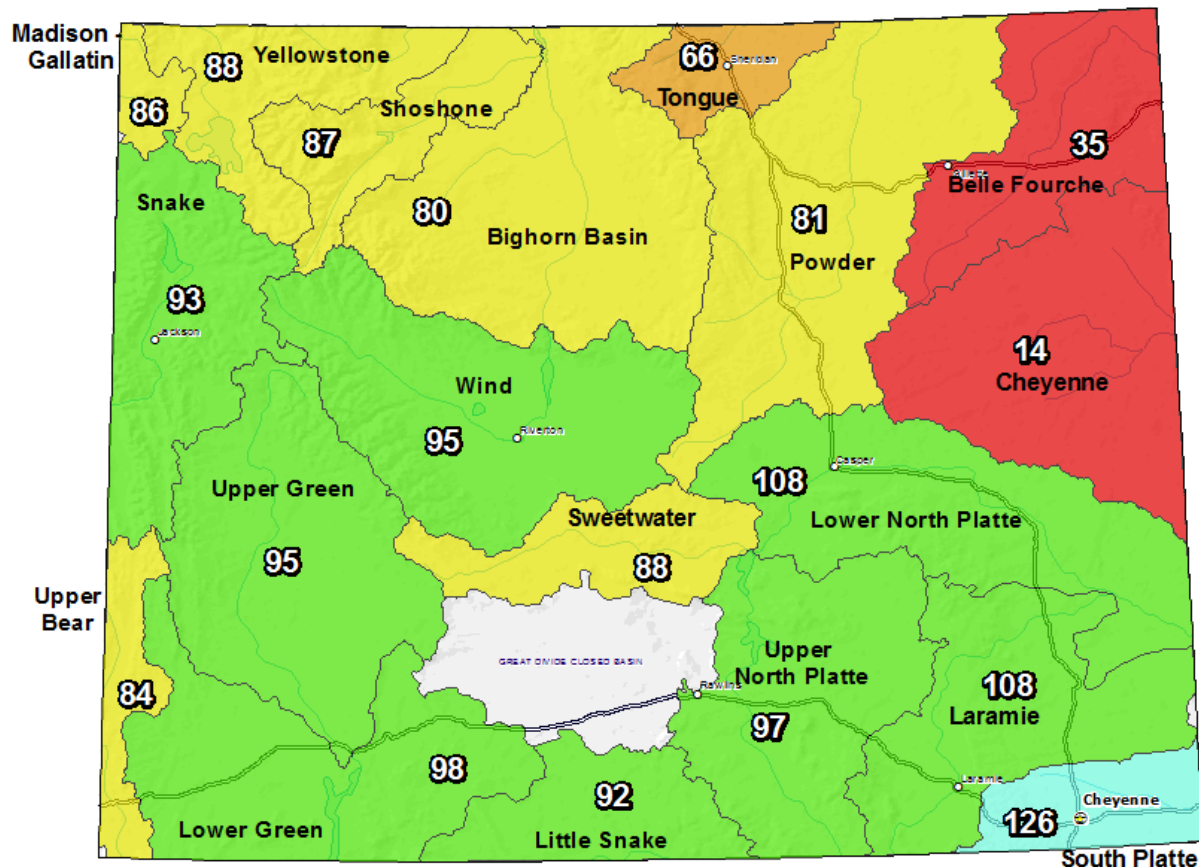
Wyoming SNOTEL Current Snow Water Equivalent (SWE) % of Normal

Apr 11, 2016

Current Snow Water Equivalent (SWE)
Basin-wide Percent
of 1981-2010 Median



*Provisional Data
Subject to Revision*



0 10 20 40 60 80 100 Miles



The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

Yellowstone Technical Meeting Snowpack and Streamflow Update April 12, 2016



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End of month snowfall made the mountains
gorgeous for March 1, 2016 surveys!