

MISSOURI RIVER BASIN WATER MANAGEMENT 2020 MRB NAVIGATORS' MEETING IKE SKELTON TRAINING SITE, JEFFERSON CITY, MO

MISSOURI MAINSTEM OPERATIONS

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Missouri Basin Water Management
Northwestern Division
26 February 2020



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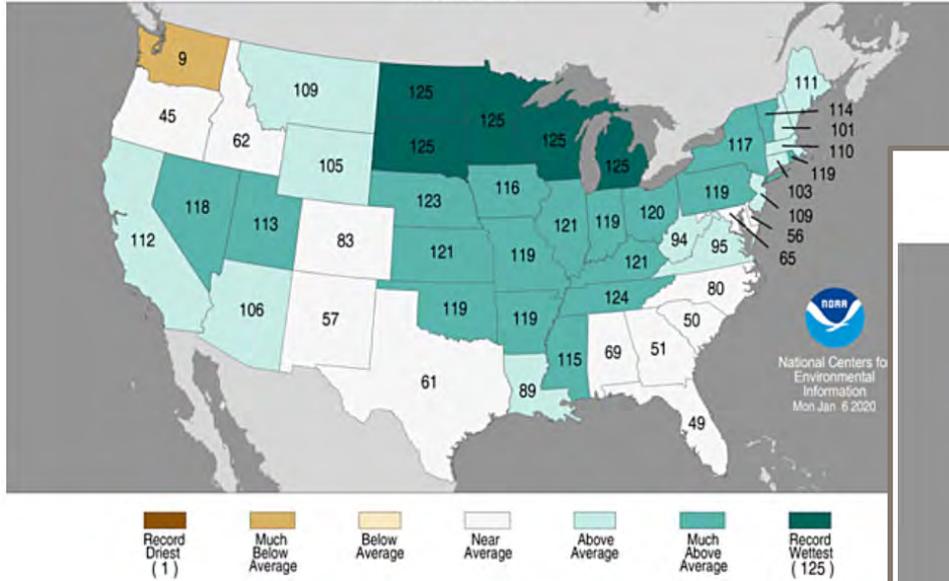


CLIMATE SUMMARY - PRECIPITATION

Statewide Precipitation Ranks

January–December 2019

Period: 1895–2019

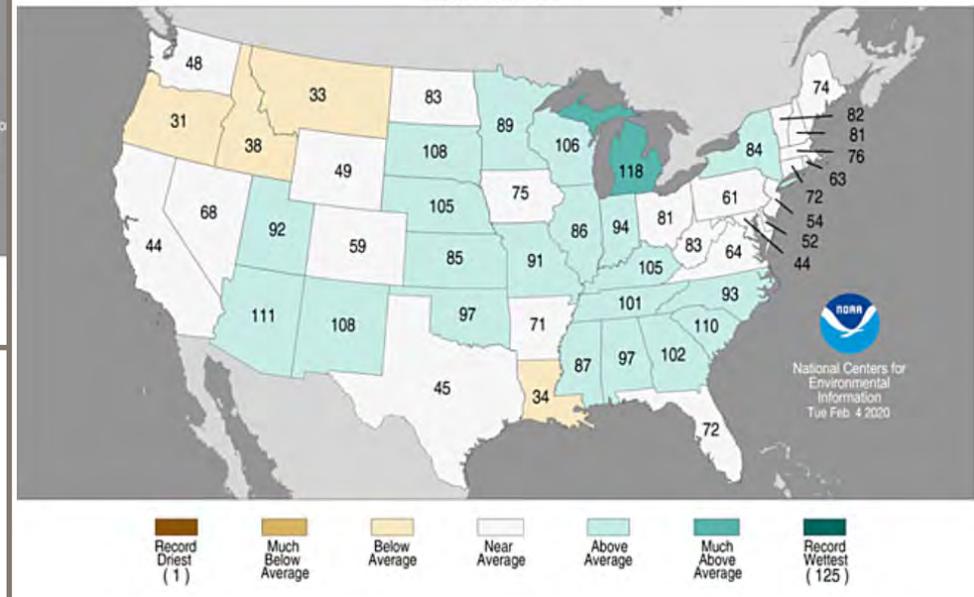


Much Above Average to **RECORD** in 2019

Statewide Precipitation Ranks

November 2019–January 2020

Period: 1895–2020



2020 Winter – Above Average

Source: NOAA, National Centers for Environmental Information



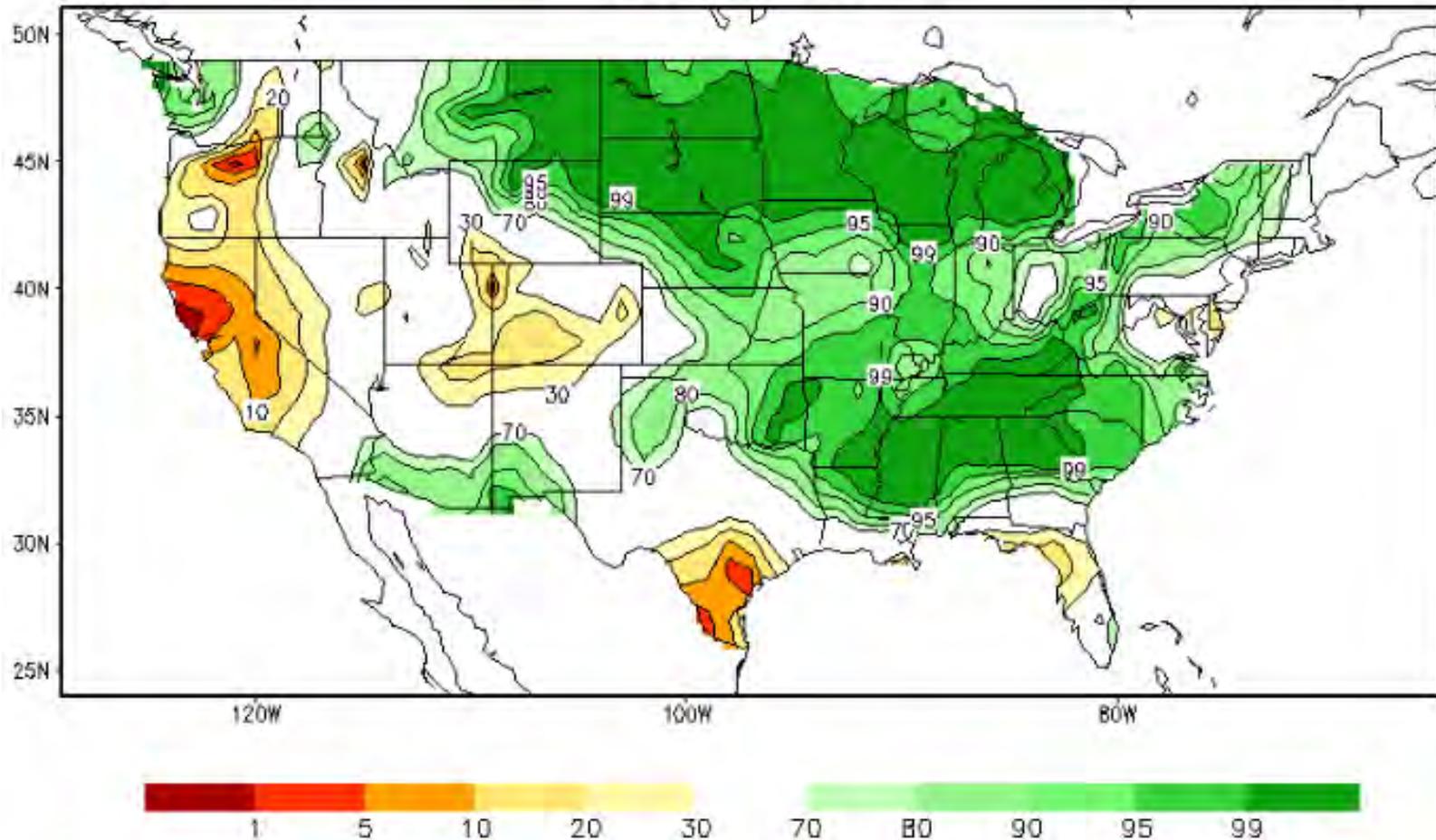
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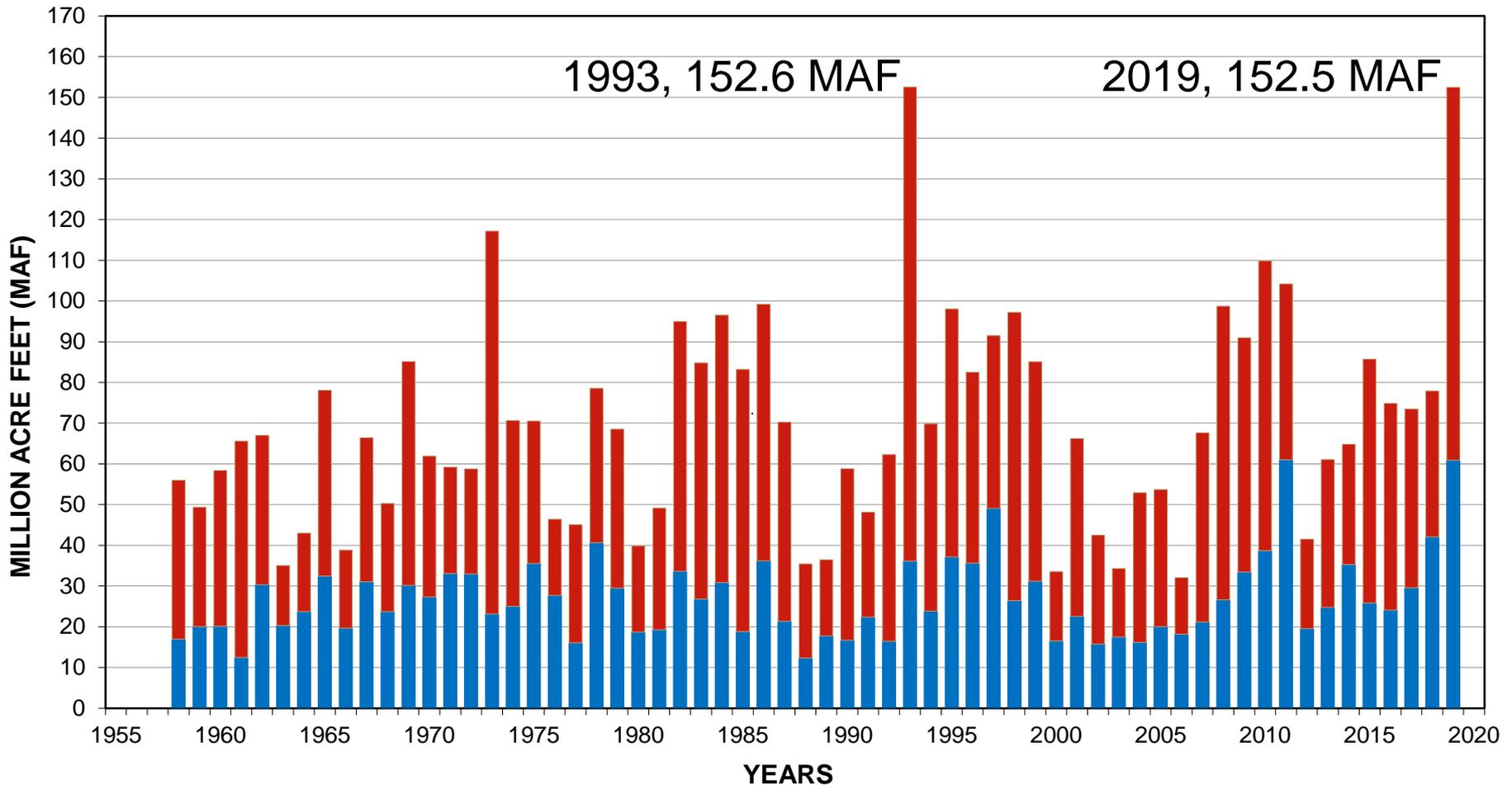
CURRENT SOIL CONDITIONS

Calculated Soil Moisture Ranking Percentile
FEB 23, 2020



Source: NOAA, Climate Prediction Center

ANNUAL MISSOURI BASIN RUNOFF



■ Upper Basin ab Sioux City, IA

■ Lower Basin bl Sioux City, IA

Average MRB Runoff (1958-2019) = 68.4 MAF



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RUNOFF COMPONENTS



PLAINS SNOWPACK

MOUNTAIN SNOWPACK

RAINFALL



2020 FORECAST* = 36.3 MILLION ACRE FEET (MAF)**

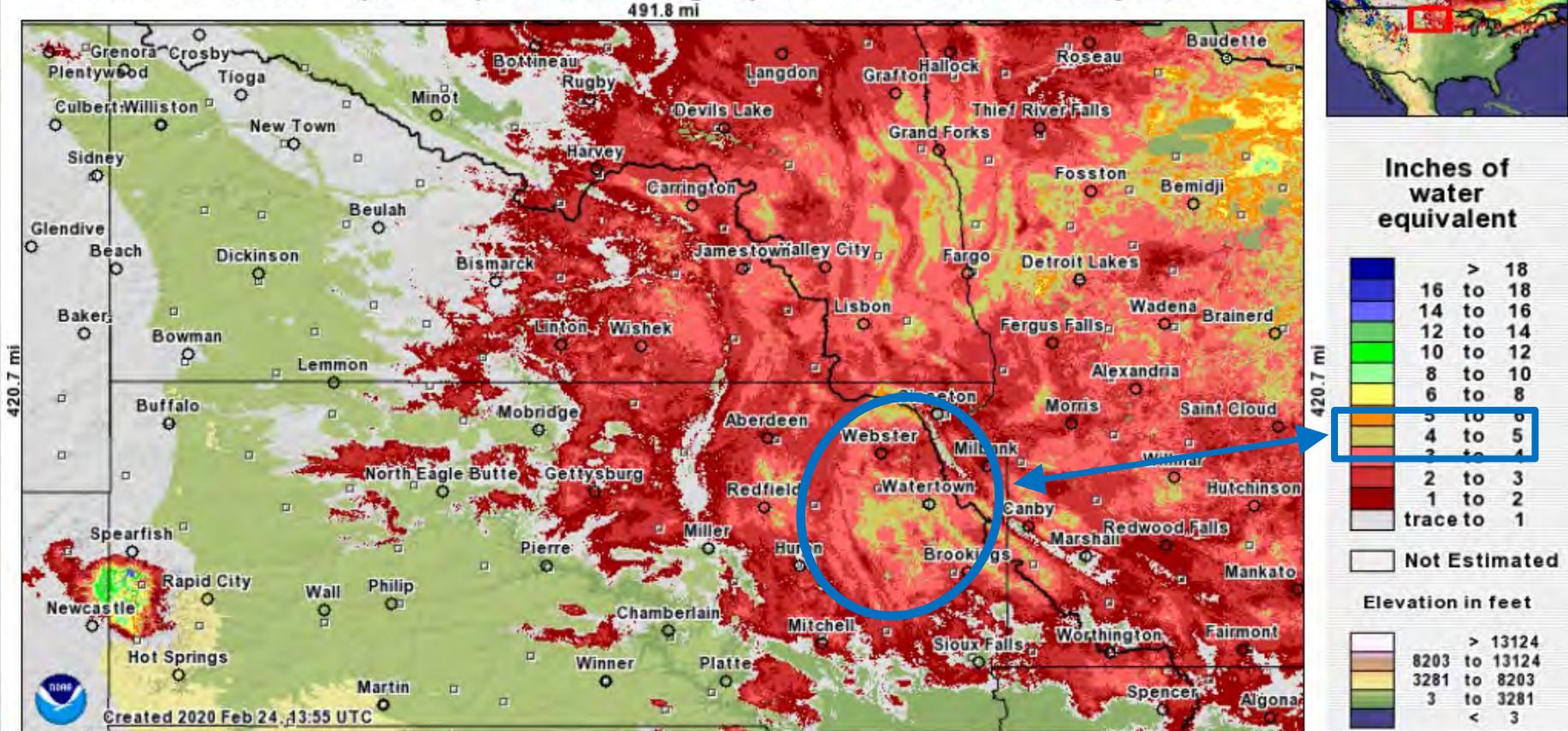
***FEBRUARY 1 FORECAST – AVERAGE ANNUAL RUNOFF IS 25.8 MAF**

****IF REALIZED, THE 2020 RUNOFF WOULD BE THE 9TH HIGHEST IN 122 YEARS OF RECORD-KEEPING (1898-2019).**

PLAINS SNOWPACK

February 24, 2020

Modeled Snow Water Equivalent (Shallow-snow Legend) forecasted for 2020 February 24, 15:00 UTC



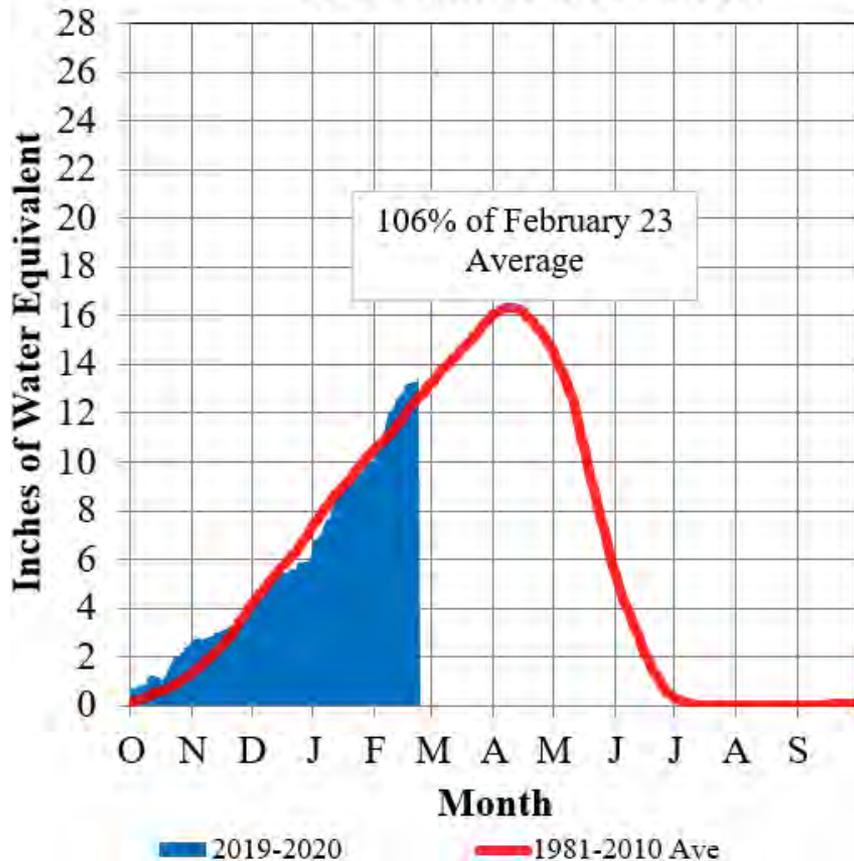
The Corp's Omaha District is deploying plains snow survey teams next week to areas of heavy snowpack to conduct ground verification. Results will be shared with NOHRSC to update this map.



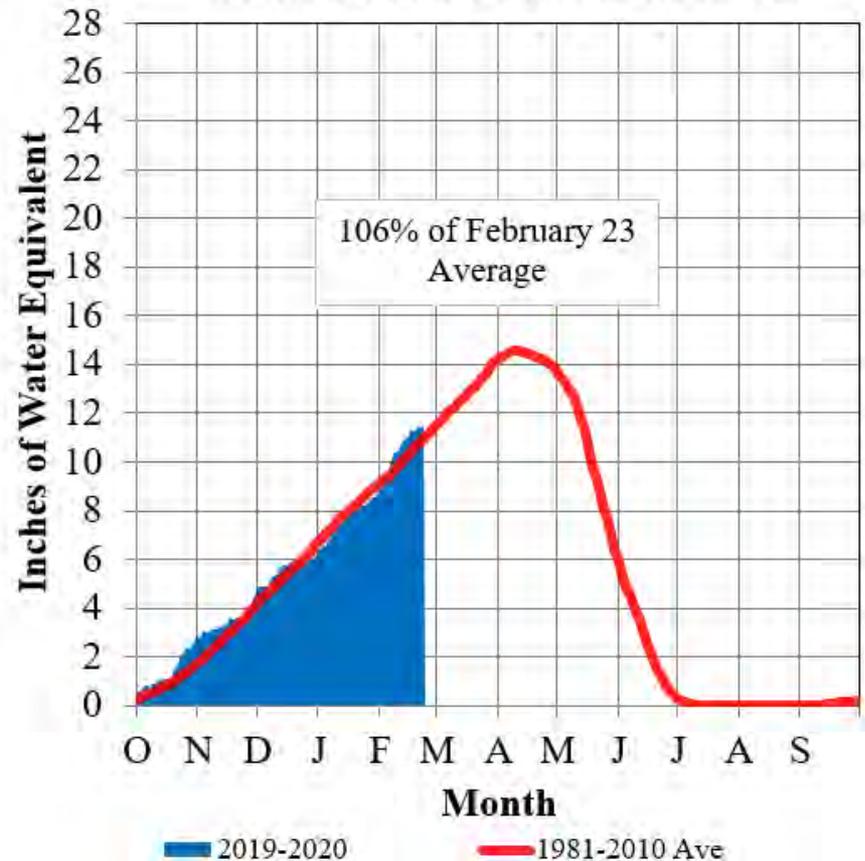
Missouri River Basin 2019-29 Mountain Snowpack

23-Feb-2020

Total above Fort Peck



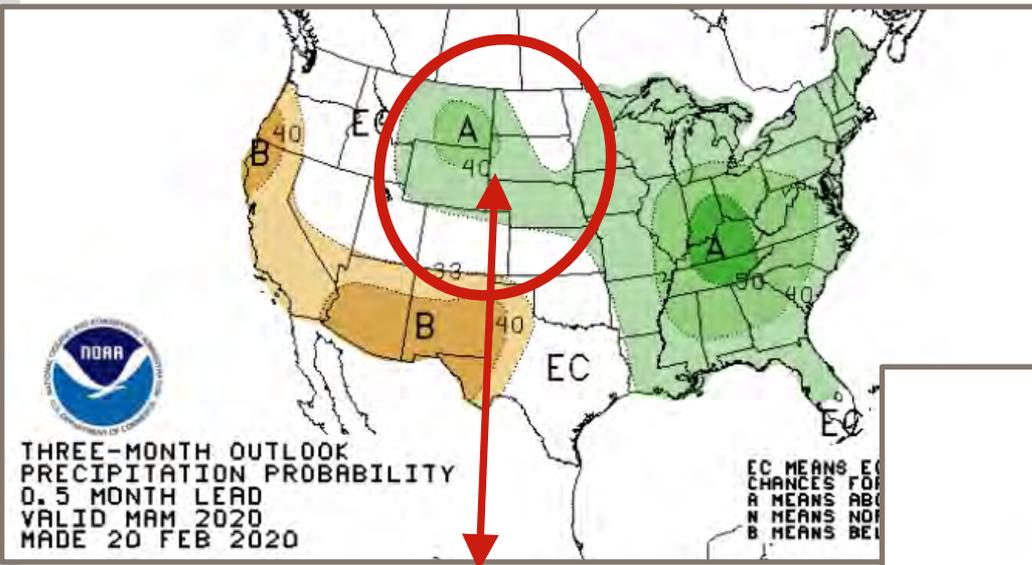
Total Fort Peck to Garrison



About 80% of peak accumulation normally occurs by March 1.

PRECIPITATION OUTLOOKS

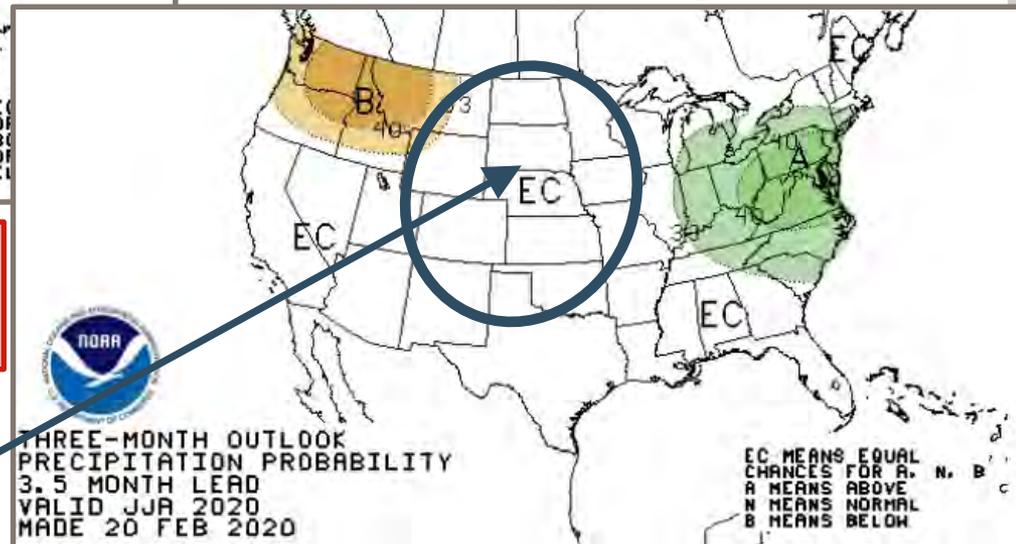
March-April-May



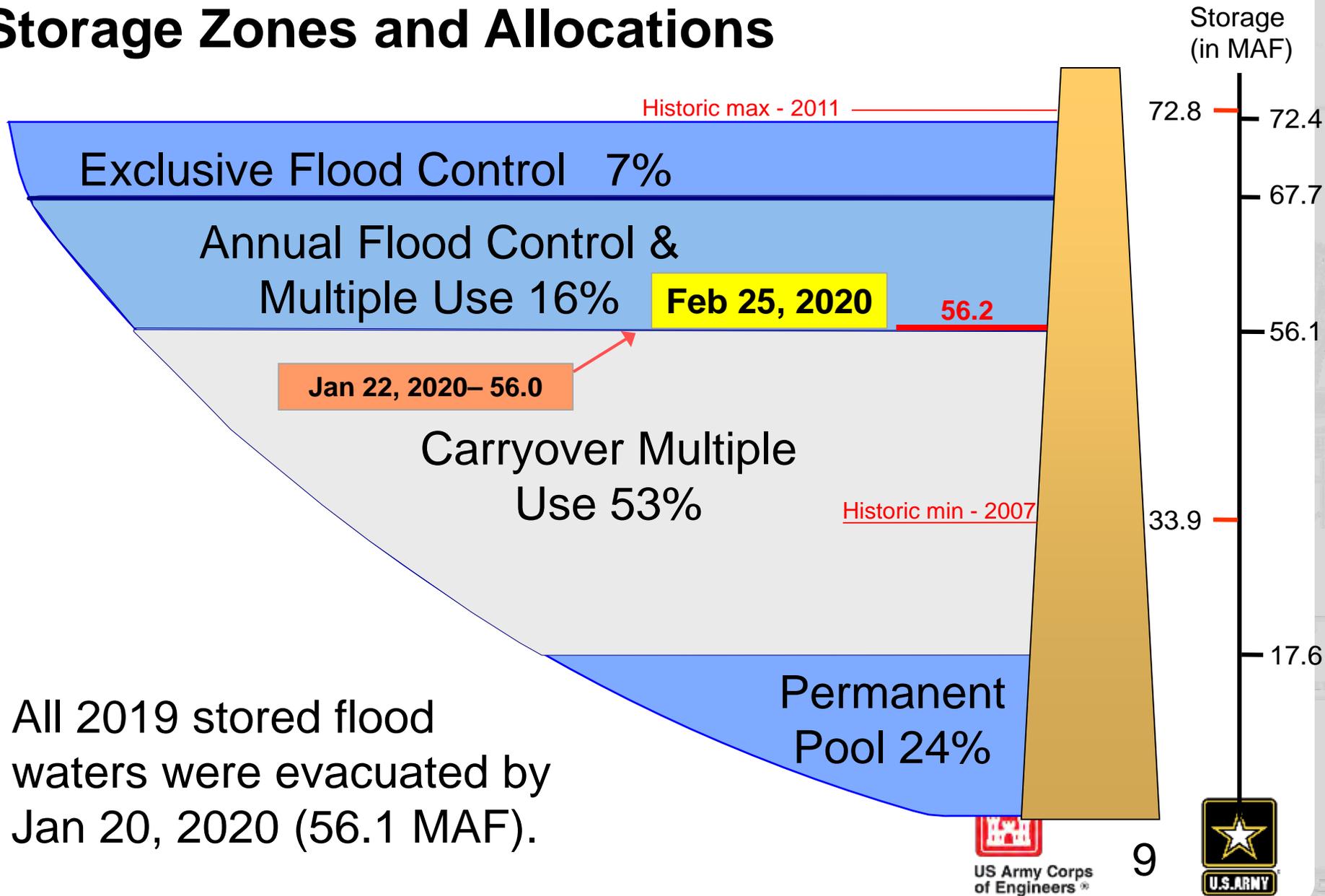
Slightly higher chance for above normal precipitation

Equal chances for above normal, normal and below normal precipitation

June-July-August

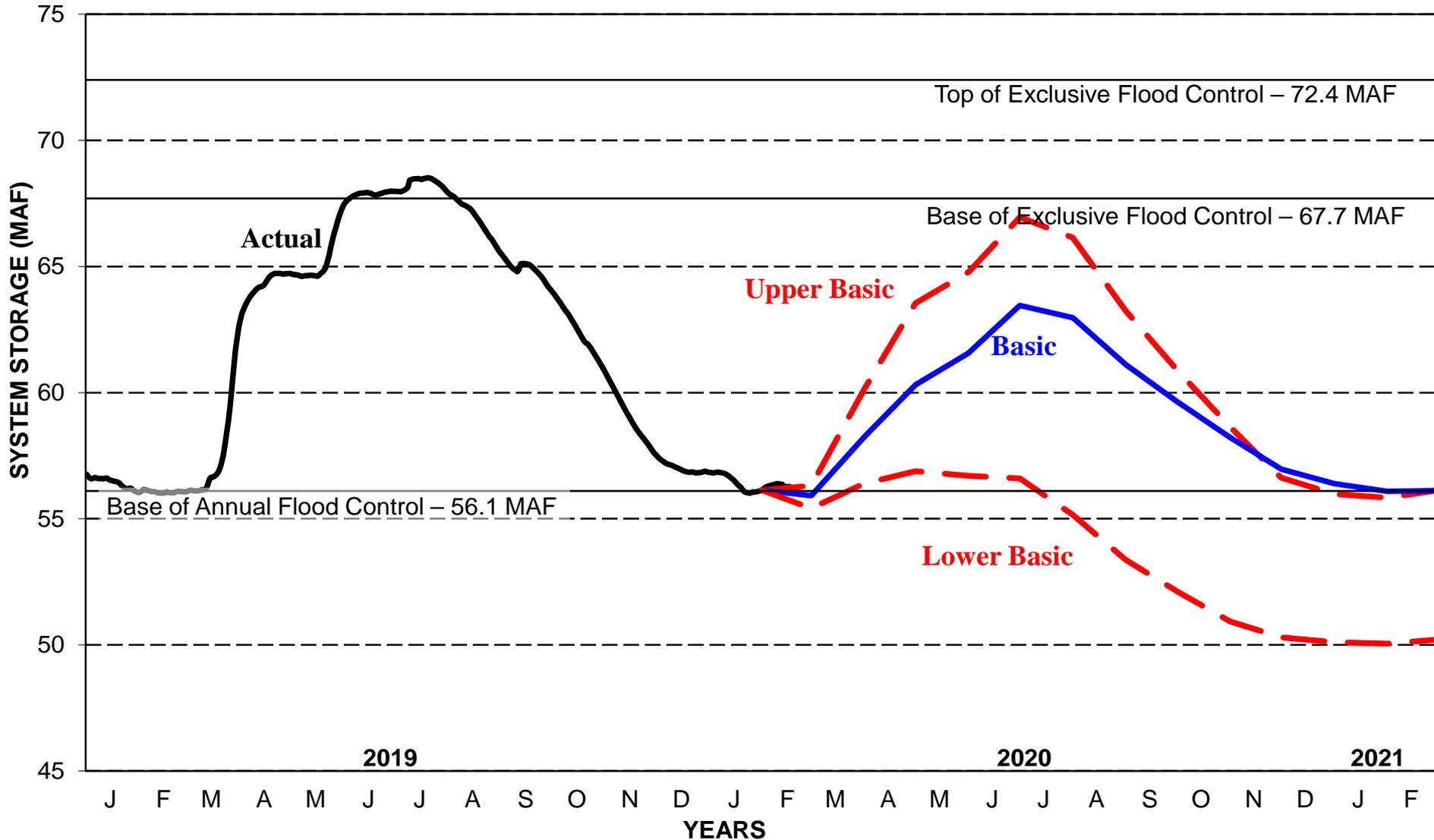


Missouri River Mainstem System Storage Zones and Allocations



Mainstem System Storage – Forecast for 2020

February 1 Monthly Study



PLANNED OPERATIONS FOR 2020*

- 2020 Runoff Forecast (Feb 1) = 36.3 MAF (Top 10)
- All stored 2019 flood waters evacuated (Jan 20, 2020)
- Navigation flow support (first half of season) based on March 15 system storage check
 - Expanded service (flood control releases)
 - Season begins April 1 at mouth
- Navigation flow support and season length (second half of season) based on July 1 system storage check
 - Expanded service (flood control releases)
 - Season Length (+10 days, December 11 at mouth)

*based on February 1 monthly studies (basic or most likely)



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PLANNED OPERATIONS FOR 2020*

■ **Navigation Flow Support**

- Basic (most likely) – expanded service for the entire season
- Lower Basic – full service for the 1st half; 500 cfs below full for 2nd half
- Upper Basic – expanded service for the entire season

■ **Length of Flow Support**

- Basic (most likely) – 10-day extension
- Lower Basic – full 8-month season
- Upper Basic – 10-day extension

■ **Opening Dates of Flow Support**

- Sioux City, IA – March 23
- Omaha, NE – March 25
- Kansas City, MO – March 28
- Mouth of Missouri – April 1

*based on February 1 monthly studies



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PLANNED OPERATIONS FOR 2020*

- We will continue with our plan for aggressive releases through the winter and spring, as conditions allow
- Favor Garrison during the forage fish spawn period if inflows are not sufficient to keep all three upper reservoirs steady or rising
- Public meetings scheduled for April 6-9 and 14
- Monthly calls with Congressional delegations, Tribes, states, local officials and media
 - Audio file available on our website
 - Next basin call scheduled for Thursday, March 5

WEEKLY UPDATE

www.nwd-mr.usace.army.mil/rcc/

<http://www.nwd-mr.usace.army.mil/rcc/reports/pdfs/weeklyupdate.pdf>

Missouri River Basin – Update – 24 February 2020

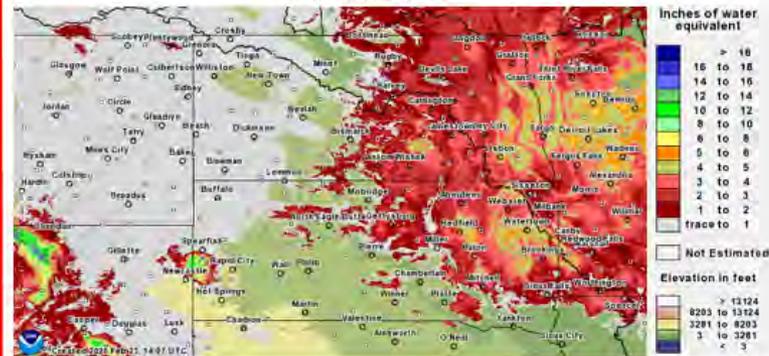
Mainstem Reservoir Status:

- ❖ System storage is 56.2 MAF; 16.2 MAF of flood control storage is available. All 2019 floodwaters were evacuated; System storage reached 56.0 MAF on January 22. We expect to see an increase in System storage this week from plains snowmelt in the upper Basin.
- ❖ Plains snowpack in the upper Basin is primarily in central and eastern ND and SD (upper right quadrant). The Omaha District is sending out snow survey teams next week to provide on-site verifications in areas where heavy plains snow is present.
- ❖ Mountain snowpack is slightly above average (lower right quadrant).
- ❖ Refer to the 3-Week Forecast ([click here](#)) for the most up-to-date System information – pool levels, inflows and releases.
- ❖ The Gavins Point release is currently 35,000 cfs, twice average for this time of year. Releases will be increased to 38,000 cfs on Feb 27, and to 41,000 cfs on Feb 28. The schedule and forecasted Missouri River flows and stages can be found here:

[Click Here](#) for Missouri River releases, flows & stages

Plains Snowpack

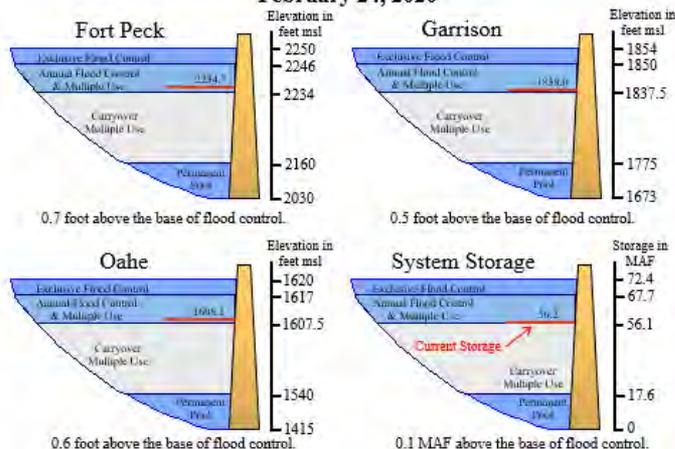
February 24, 2020



*Source: <https://www.noahsc.noaa.gov>

Current Reservoir Levels

February 24, 2020

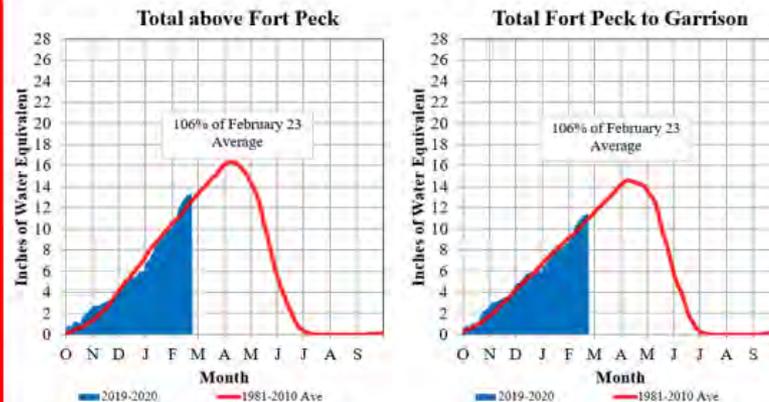


[Click Here](#) for Latest 3-Week Forecast

[Click Here](#) for Comparison Plots

Mountain Snowpack

February 23, 2020



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2020 SPRING PUBLIC MEETINGS

(Tentative Schedule)

Monday, April 6	Fort Peck, MT
Tuesday, April 7	Bismarck, ND
Tuesday, April 7	Fort Pierre, SD
Wednesday, April 8	Smithville, MO
Wednesday, April 8	Nebraska City, NE
Thursday, April 9	Sioux City, IA
Tuesday, April 14	Jefferson City, MO
Tuesday, April 14	St. Louis, MO

Times and locations still being determined. A press release will be issued in March when everything is finalized.



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Visit the MRBWM website:
www.nwd-mr.usace.army.mil/rcc/
or Google: *corps missouri river*

THANK YOU!

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