

# MISSOURI RIVER BASIN WATER MANAGEMENT

## SPRING FLOOD FIGHT TRAINING MARCH 12, 2019

Ryan Larsen, P.E.  
Hydraulic Engineer  
Power Production  
Missouri River Basin Water  
Management



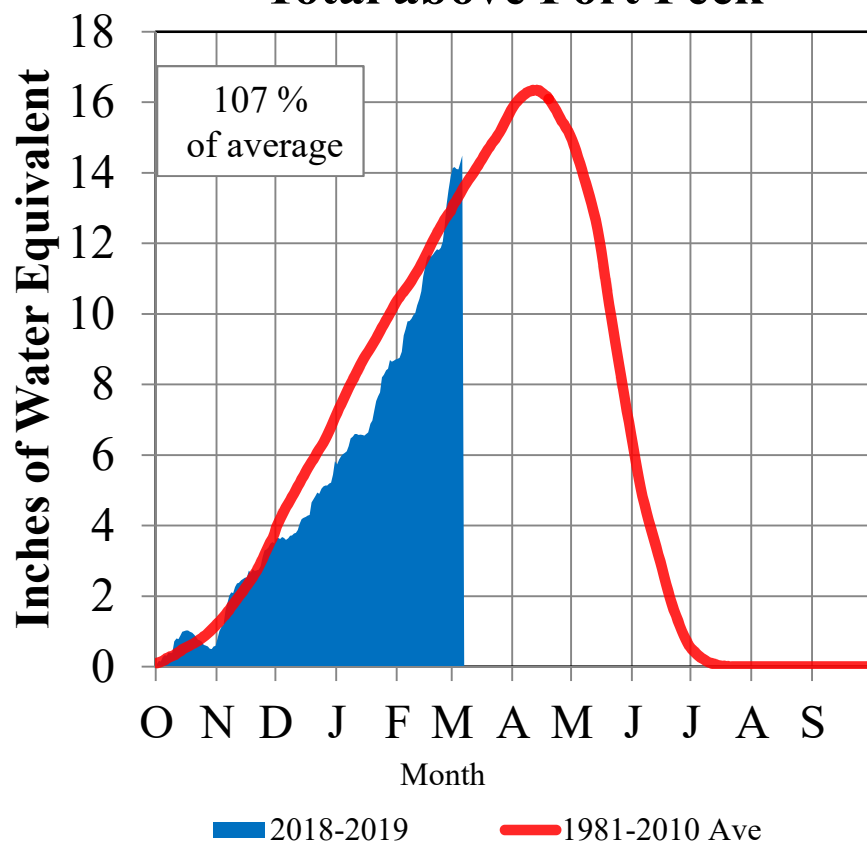
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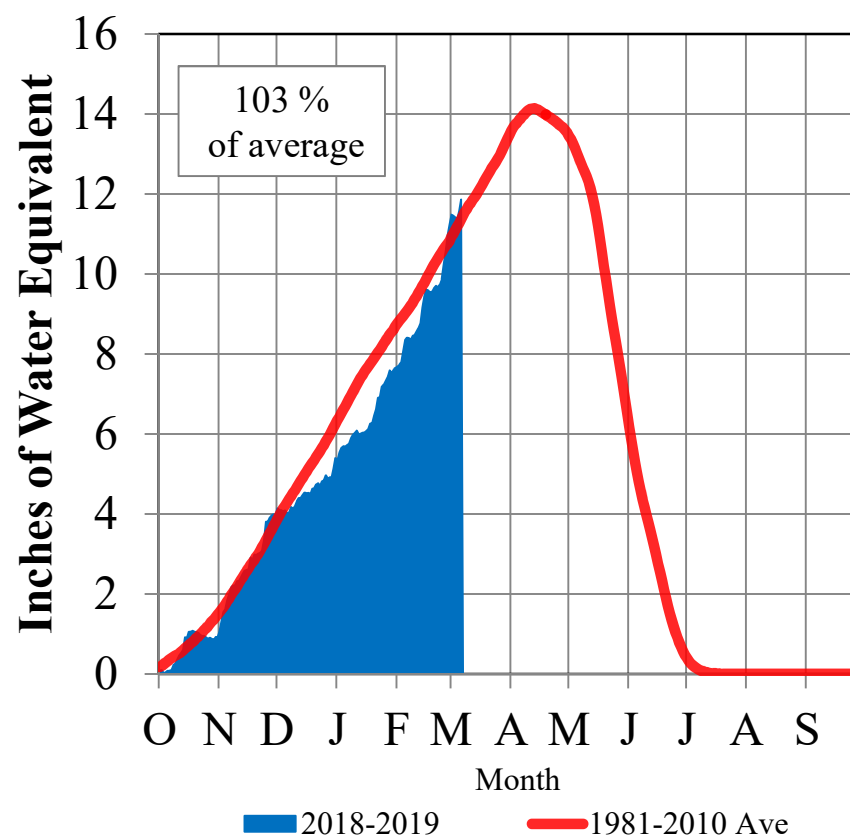
# Mountain Snowpack

## March 7, 2019

### Total above Fort Peck



### Total Fort Peck to Garrison

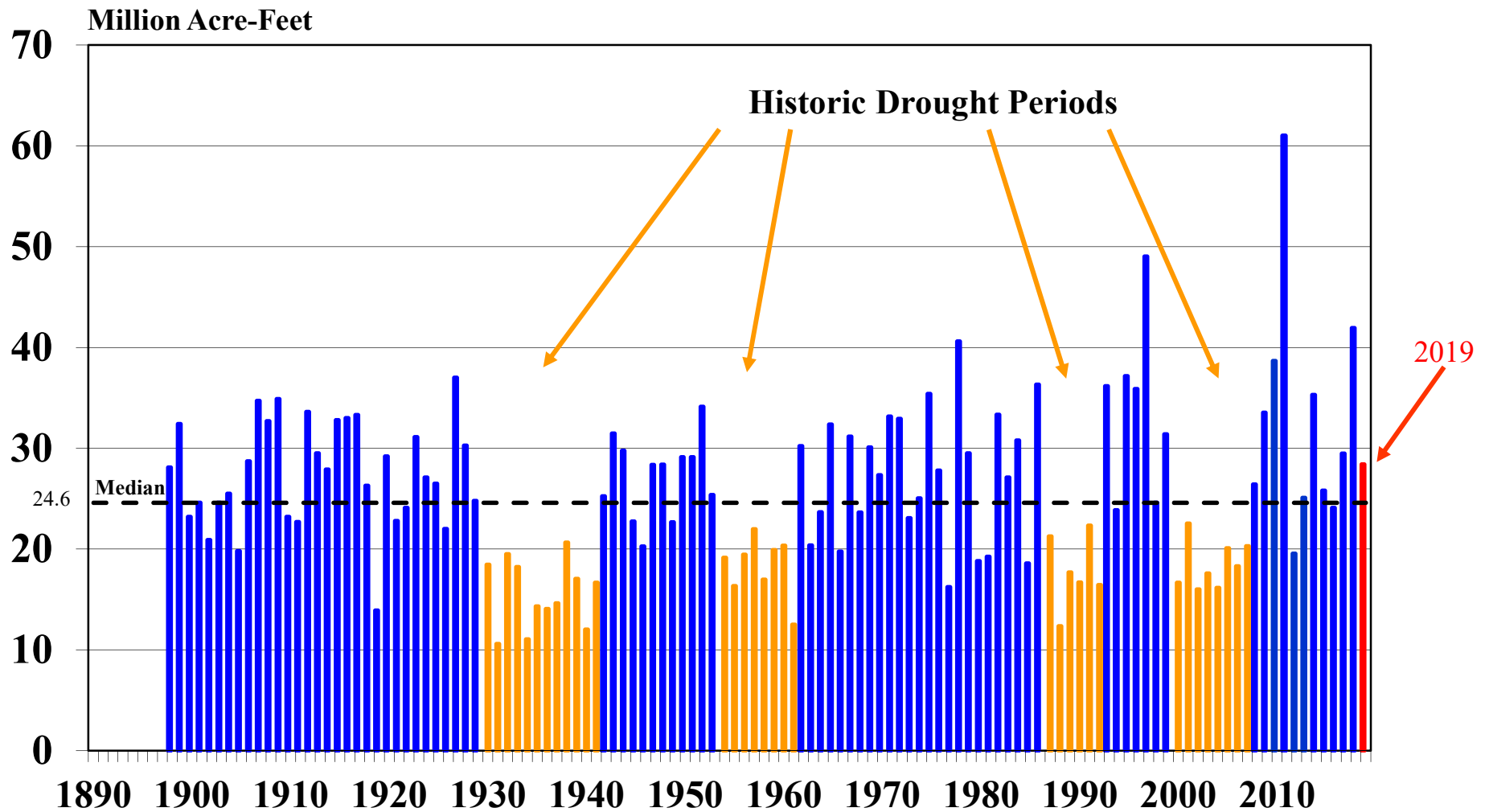


The Missouri River Basin mountain snowpack normally peaks near April 15.

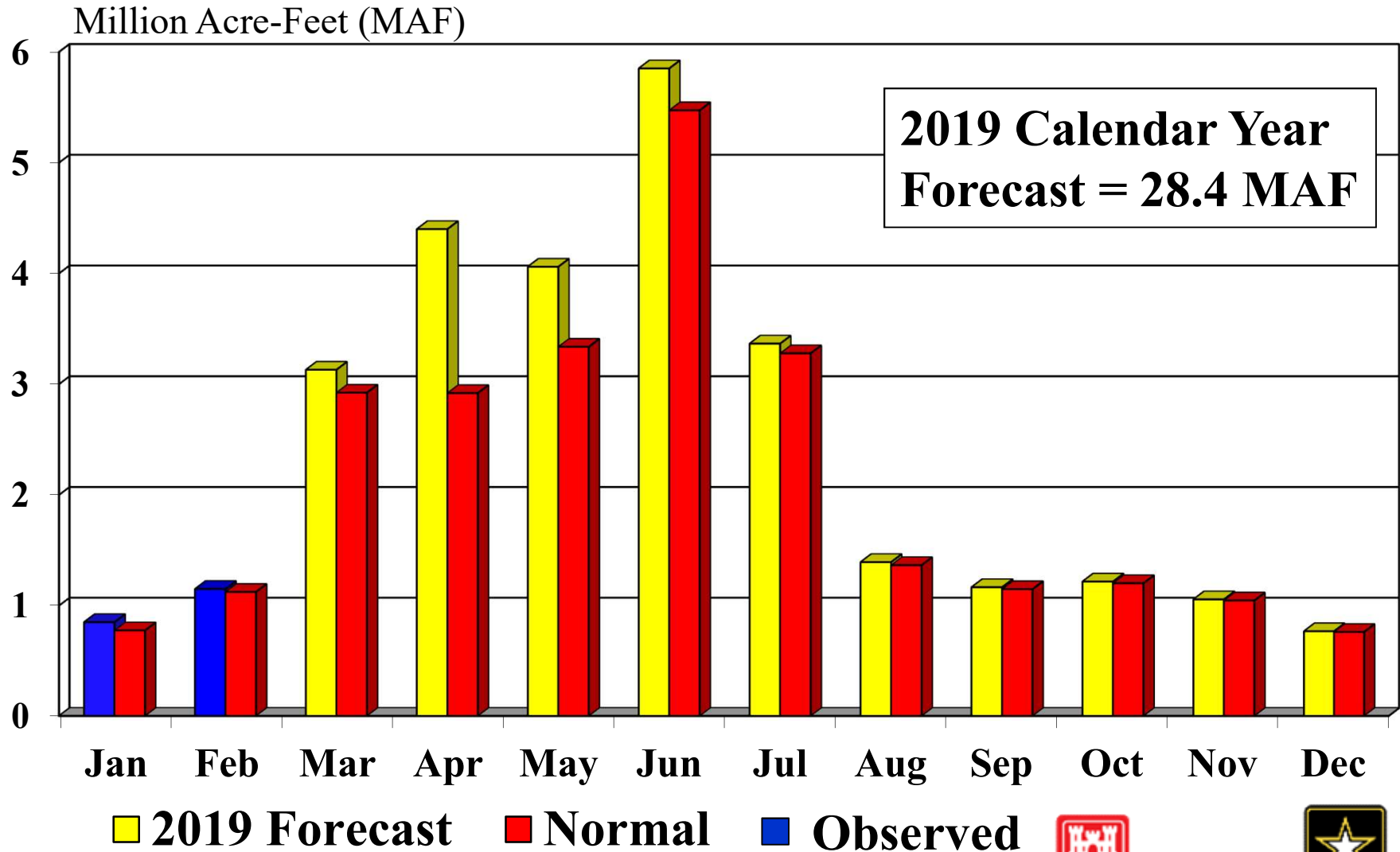
Source: USDA-NRCS



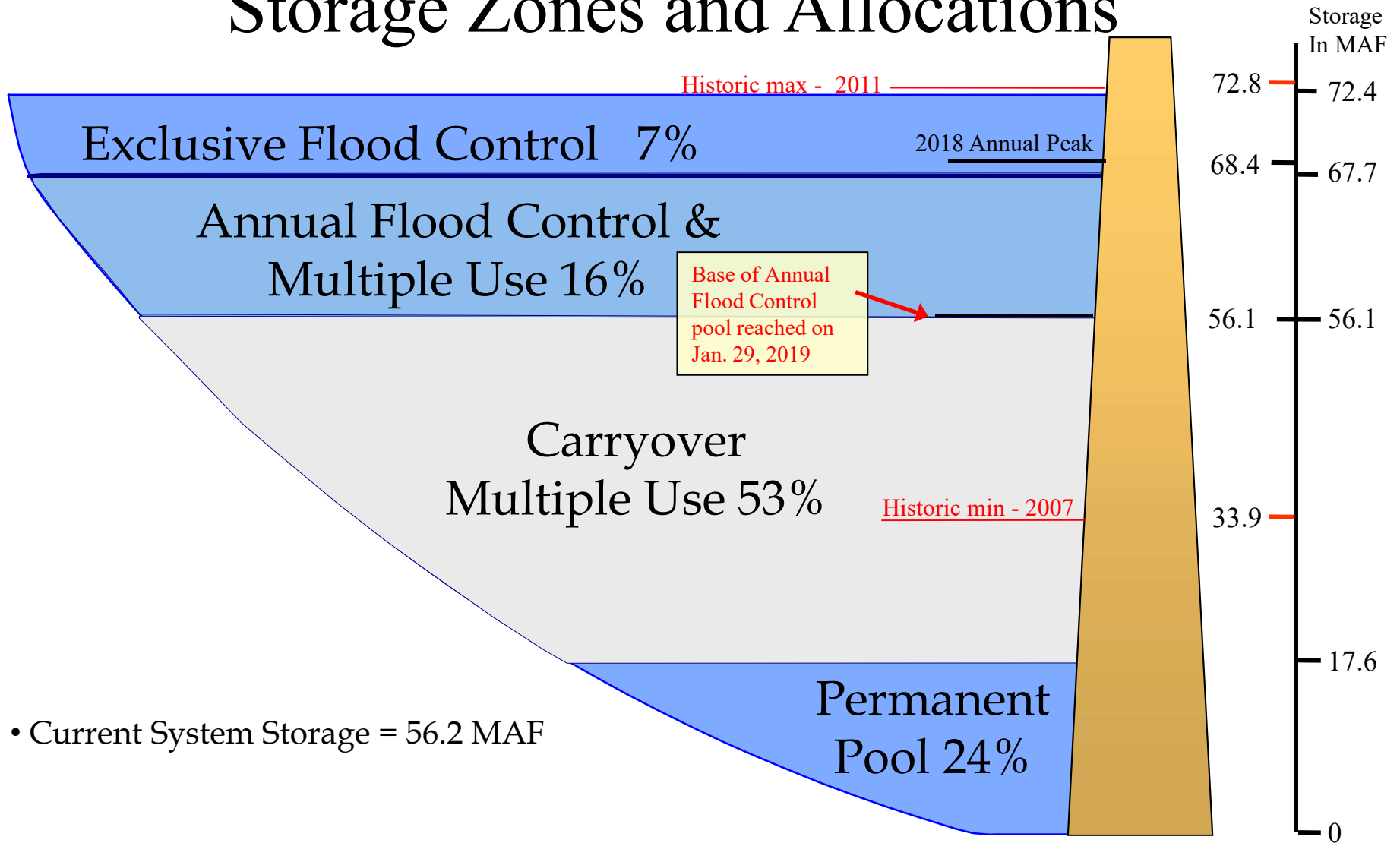
# MISSOURI RIVER MAINSTEM SYSTEM ANNUAL RUNOFF ABOVE SIOUX CITY, IA



# MISSOURI RIVER RUNOFF ABOVE SIOUX CITY, IOWA 2019 FORECAST

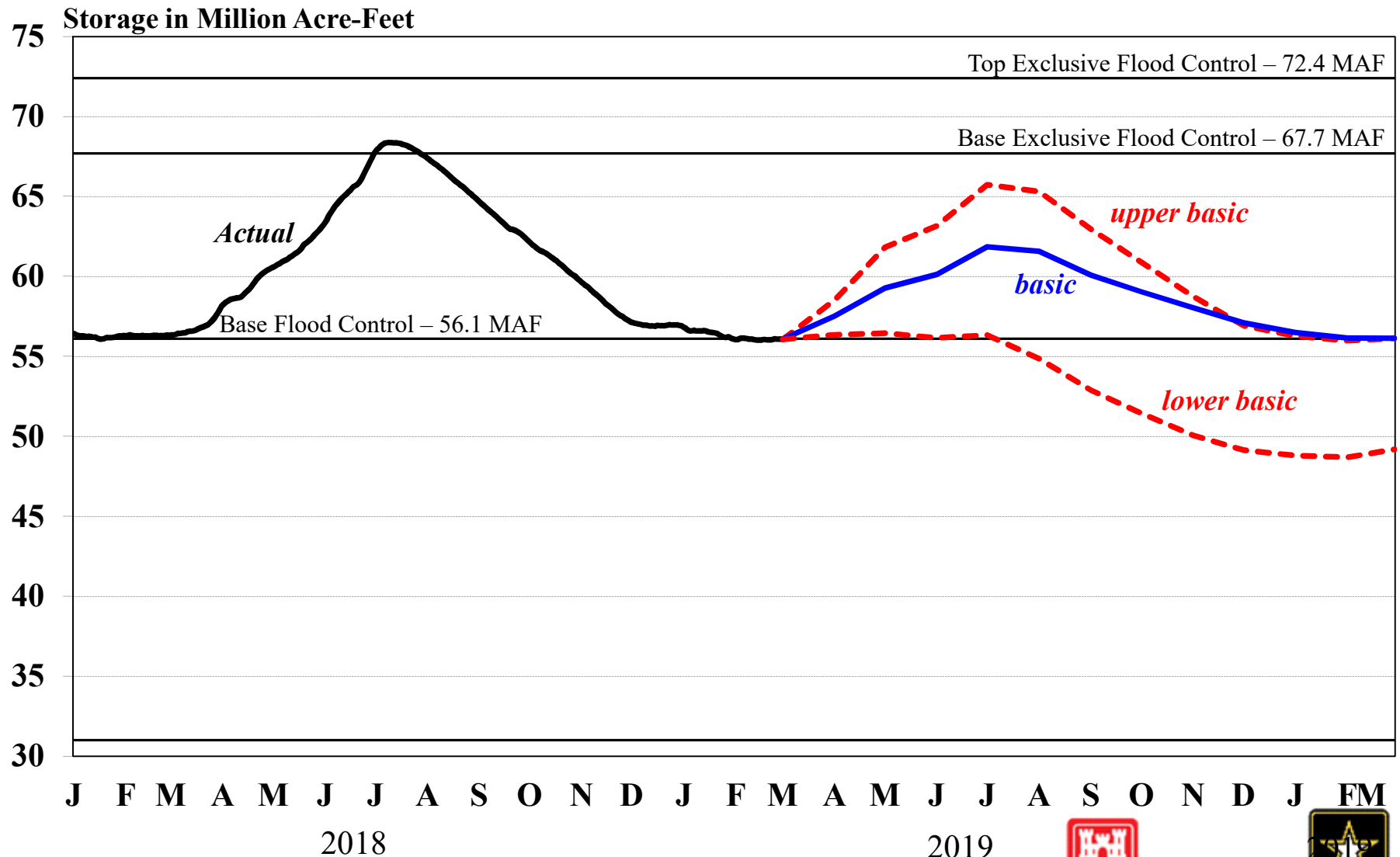


# Missouri River Mainstem System Storage Zones and Allocations

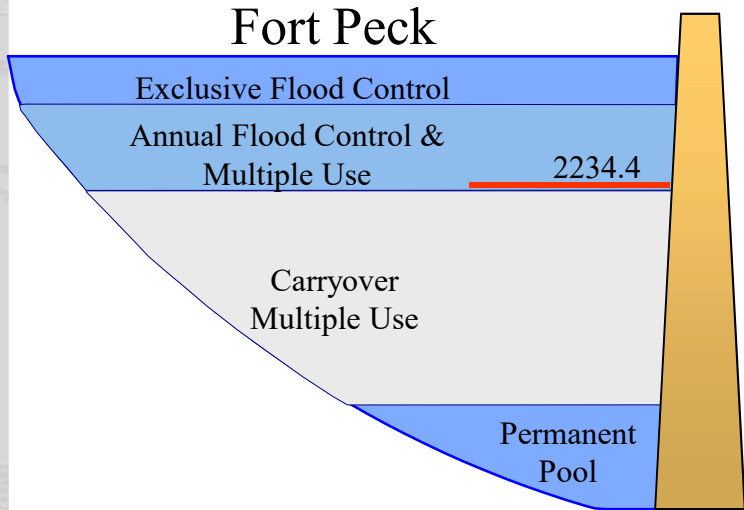


# Mainstem System Storage – Forecast for 2019

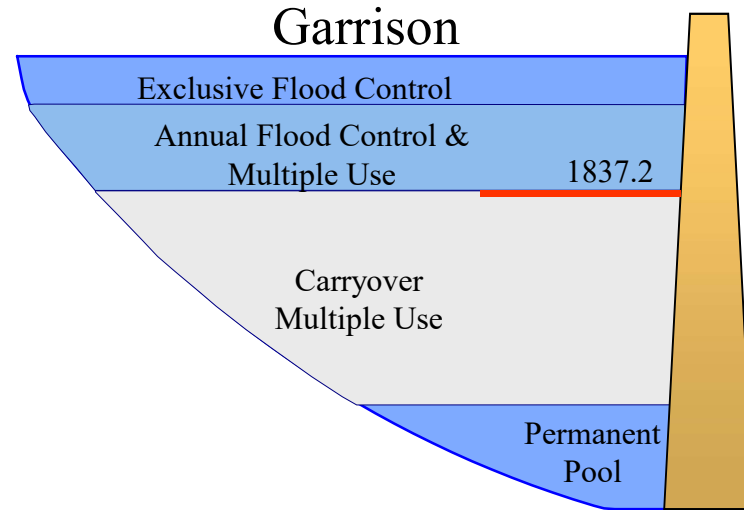
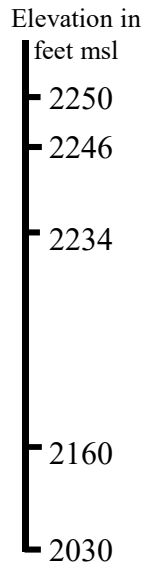
## March 1 Monthly Study



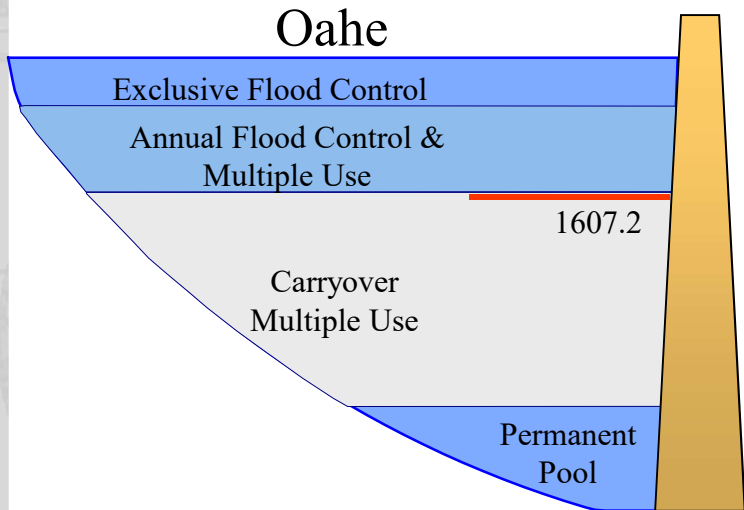
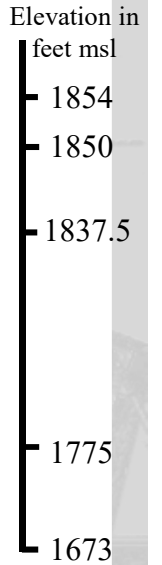
# CURRENT RESERVOIR LEVELS – MAR 9, 2019



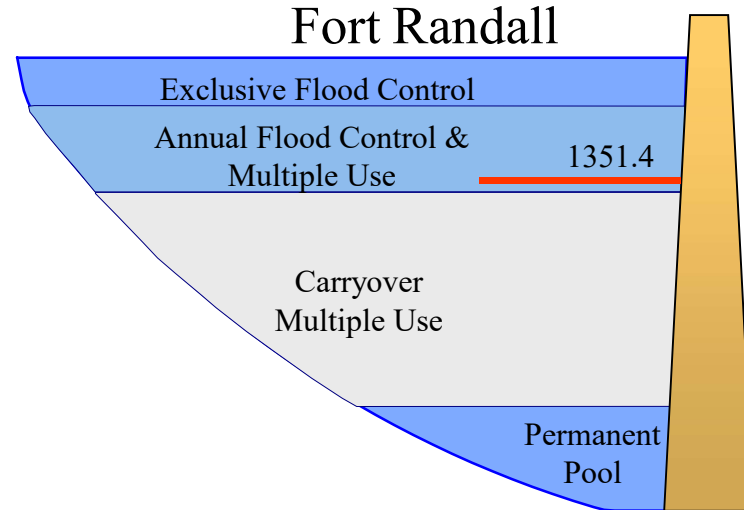
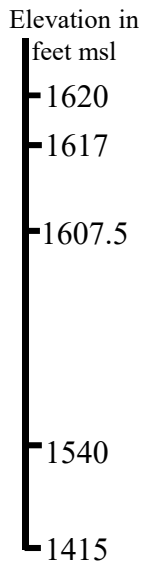
0.4 foot above base of Flood Control zone



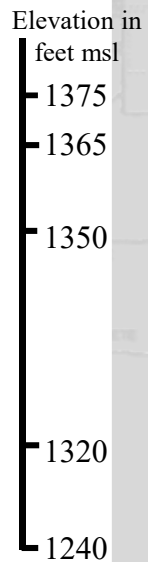
0.3 foot below base of Flood Control zone



0.3 foot below base of Flood Control zone



1.4 foot above base of Flood Control zone



# 2019 RESERVOIR OPERATIONS

- Total system storage at the base of the Annual Flood Control zone at start of runoff season; all 2018 flood water has been evacuated
- Full service navigation support during first half of the season
  - Service level for second half of season and season length based on 1 July system storage
- Hydropower: annual generation forecast is 10.0 BkWh
- Recreation, water supply and irrigation
  - Good support; no problems anticipated at this time
- Fish and Wildlife / Endangered Species
  - Favor Fort Peck/Oahe during forage fish spawn if runoff is not sufficient to keep all three upper reservoirs rising
  - Normal summer bird operations anticipated



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# KEY DATES

- Final AOP released in late December; runoff and reservoir regulation studies updated at the beginning of each month
- Monthly calls with Congressional delegations, Tribes, states and local officials and media resumed in January
  - Next call is May 7, 2019
- Public meetings scheduled April 9-11, 2019
  - Fort Peck, Bismarck, Pierre, Sioux City, Smithville, Nebraska City
- Start of 2019 navigation season April 1 at the mouth



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# Missouri River Basin – Weekly Update – 5 Mar 2019

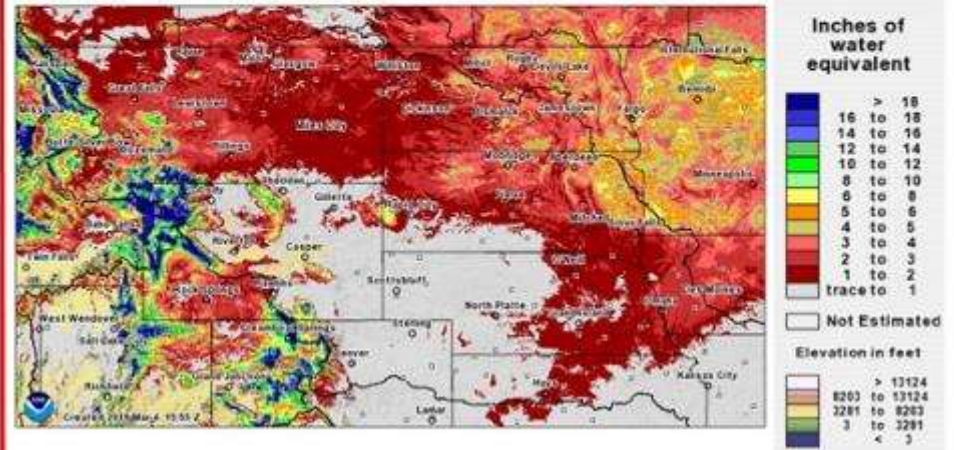
## Mainstem Reservoir Status:

- ❖ System storage is 56.1 MAF, at the base of the Annual Flood Control and Multiple Use Zone, which means that all 16.3 MAF of flood storage is available.
- ❖ The upper Basin runoff forecast for 2019 is 28.4 MAF, which is 112% of average.
- ❖ Plains snow conditions vary throughout the upper Basin: moderate in Montana and the western Dakotas, and moderate-to-heavy in the central and eastern Dakotas (upper right graphic).
- ❖ Mountain snowpack accumulation is slightly above average (lower right graphic).
- ❖ The Gavins Point release will be increased to 20,000 cfs later this week.
- ❖ The Gavins Point release schedule and forecasted Missouri River flows and stages can be found here:

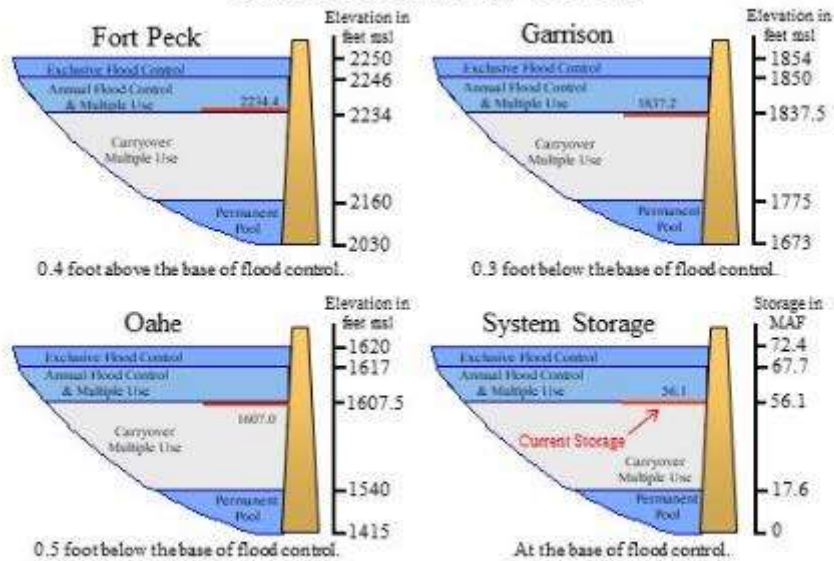
[Click Here](#) for Missouri River releases, flows & stages

## Plains Snowpack

March 4, 2019



## Current Reservoir Levels

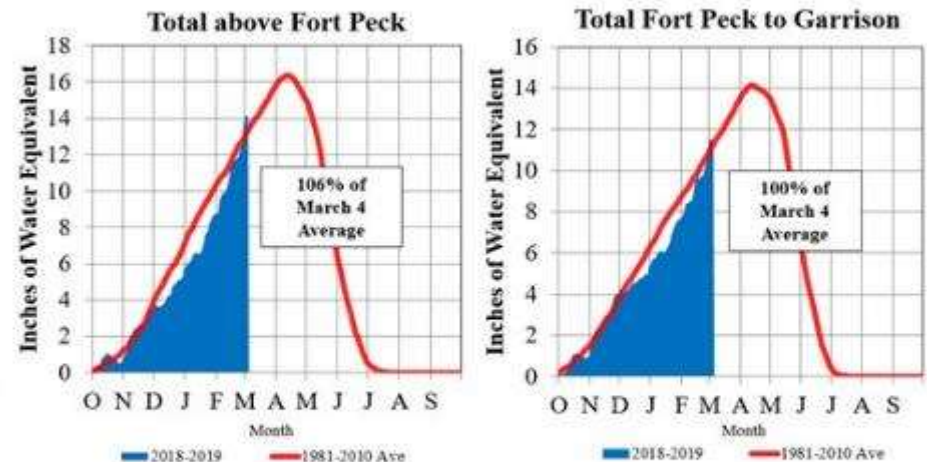


[Click Here](#) for Latest 3-Week Forecast

[Click Here](#) for Comparison Plots

## Mountain Snowpack

March 4, 2019



The Missouri River Basin mountain snowpack normally peaks near April 15.

Visit the MRBWM website:  
[www.nwd-mr.usace.army.mil/rcc/](http://www.nwd-mr.usace.army.mil/rcc/)  
Or Google “Corps Missouri River”

**THANK YOU!**



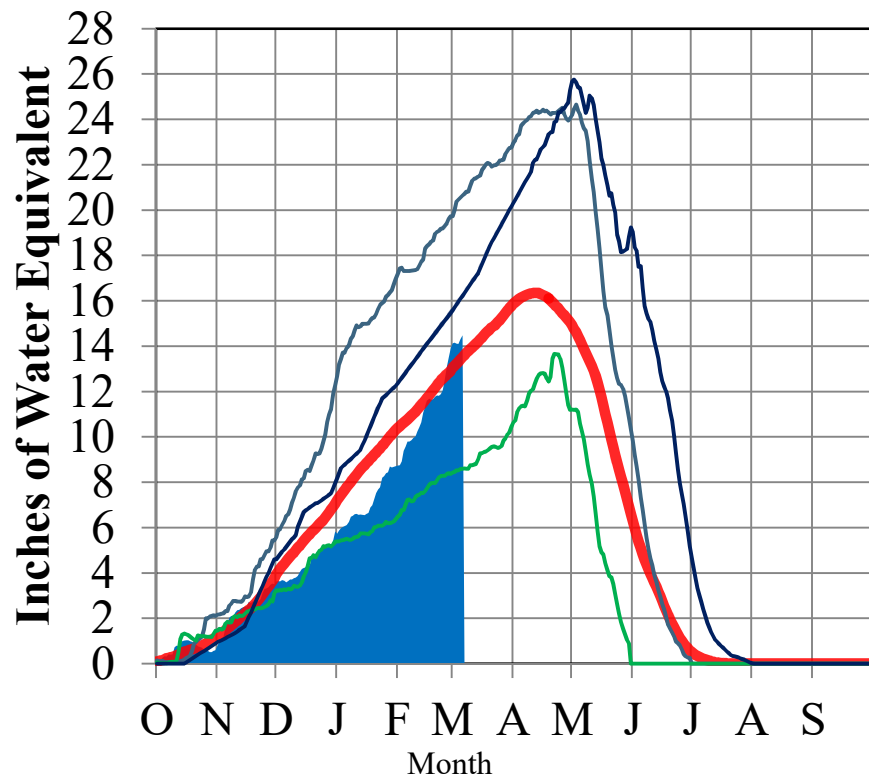
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# Missouri River Basin – Mountain Snowpack Water Content 2018-2019 with comparison plots from 1997\*, 2001\*, and 2011

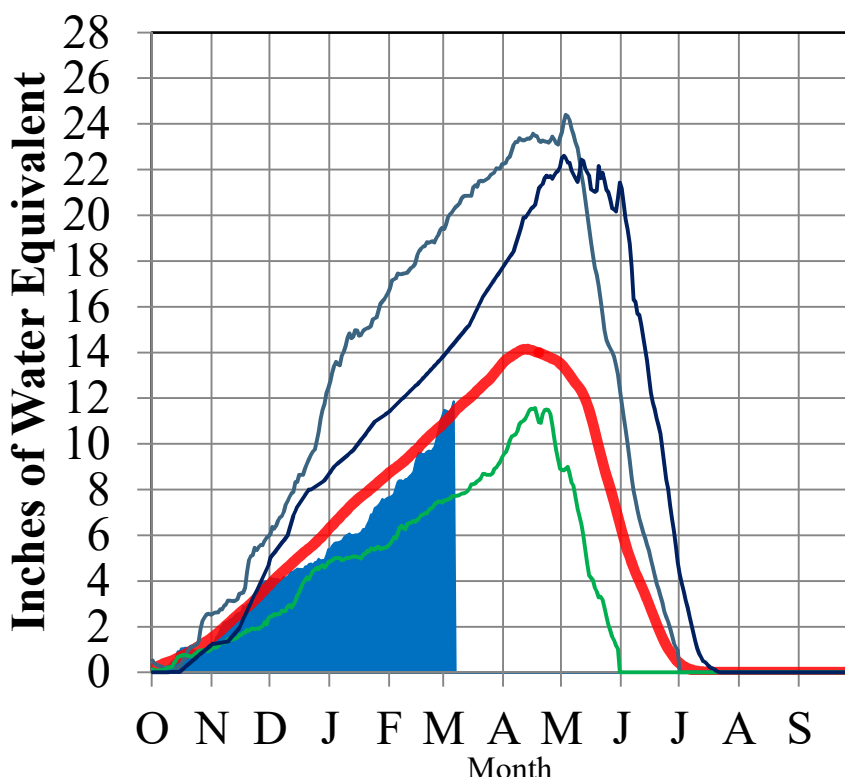
March 7, 2019

Total above Fort Peck



■ 2018-2019 ■ 1981-2010 Ave — 1997 — 2001 — 2011

Total Fort Peck to Garrison



■ 2018-2019 ■ 1981-2010 Ave — 1997 — 2001 — 2011

The Missouri River Basin mountain snowpack normally peaks near April 15. On March 7, 2019 the mountain Snow Water Equivalent (SWE) in the “Total above Fort Peck” reach was 14.5”, 107% of the March 7 average. The mountain SWE in the “Total Fort Peck to Garrison” reach was 11.9”, 103% of the March 7 average. Normally by March 1, about 79% of the total accumulation has occurred.



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\*Generally considered the high and low year of the last 20-year period, respectively.

Provisional data. Subject to revision.